610-5

M4Gp
147

DOMINA RERUM SAPIENTIA

Library
of the
Academy of Medicine,
Toronto.

3563

Presented by

W. H. Young, Esq. M.D.
1917

Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

http://www.archive.org/details/medicalpresscirc147londuoft

THE

Medical Press

and Circular. Estab. 1838.

Being the Incorporation of the Journals hitherto known as "The Medical Press"
and "The Medical Circular."

A Weekly Journal

OF

MEDICINE AND MEDICAL AFFAIRS.

FROM JULY TO DECEMBER,

1913.

LIBRARY
MAY 3 1 2002
UNIVERSITY OF TORONTO

LONDON: 8 HENRIETTA STREET, STRAND; DUBLIN: 29 NASSAU STREET.

INDEX.

VOL. XCVI. NEW SERIES. (VOL. CXLVII. OLD SERIES.)

JULY TO DECEMBER, 1913.

ARTICLES (LEADING).

Allocation of funds for insured persons not on the panel, 360
Amalgamation of St. George's and Westminster hospitals, 54
Anaphylaxis, 240
B.M.A. 518, 574. Subscription, 632
B.M.A. Brighton Meeting. The address in medicine, 108, and the address in surgery, 109
B.M.A. Suggested reforms, 80
B.M.A. The future of, 360
Commission on venereal disease, 492
Compulsory operations under the Children Act, 713
Ethics of the press notice, 134
Falling birth-rate, 464
Flies and infirmaries, 310
Food poisoning, 311
Friendly societies and a state medical service, 334
Gonorrhœa, 661
Health of the City of London, 493
Hospital system. Future of, 26
Ireland and the medical benefit, 162
Ireland. The profession in, 81
Irish Insurance Commission, 27
King Edward fund and the small hospitals, 686
Labour dispute in Dublin, 465
London hospital appointments, 602
Marriage, birth and death rates in 1912, 2
Medical events in 1913, 712
Medical men and lay notices, 436
Medical profession and trade unionism, 214
Methods of medical education, 386
Myopia in schools, 214
Parasyphilis, 412
Resignation of the staff of a London hospital, 54
Scarlet fever epidemic in London, 546
Seventeenth International Congress of Medicine, 162
Surgery of the future, 188
Syphilis. The organism of, 660
Turn of the medical kaleidoscope, 188
What of Wisbech? 546

AUTHORS.

B. = Book.
C.L. = Clinical Lecture.
C.R. = Clinical Record.
L. = Letter to the Editor.
O.P. = Original Paper.
O.R. = Out-Patient's Room.
O.T. = Operating Theatres.

Aarons, Dr. Jervis (B.), 103
Abney, Sir W. (B.), 74
Adam, Dr. James (B.), 485
Adami, Dr. L. G. (B.), 381
Adjustment Agency (L.), 731
Adler, Dr. J. (B.), 183
Alderson, Dr. W. E. (B.), 626
Alexander, Dr. D. Moore (O.P.), 529
Alexander, Dr. J. H. (O.P.) 229
Anglo-Français (L.), 301, 379, 483
Anglo-Indian (L.), 330
Ash, E. S. (L.), 566
Ashton, Dr. E. (B.), 304
Baldwin, Aslett (O.T.), 176, 507
Bandelier, Dr. (B.), 183
Bankart, A. S. Blundell (O.P.), 33
Barbour, Dr. A. H. F. (B.), 382
Barcroft, Dr. D. M. (B.) (O.P.), 190, 406
Barlow, Sir Thomas (O.P.), 171
Barnard, W. (B.), 103
Batten, Dr. F. E. (B.), 209, (O.P.) 445
Berard, Prof. Leon (C.L.), 416
Bernstein, Dr. J. M. (B.), 381
Berry, George A. (L.), 726
Berry, James (O.T.), 424
Binnie, T. Fairbairn, (B.), 74
Birnbaum, Prof. R. (B.), 382
Blacker, Dr. G. (B.), 382
Bland-Sutton, Sir John (C.L.), 468
Blechmann, Dr. G. (B.), 303
Bolam, J. (B.), 626
Bolton, Dr. N. Hay (O.P.), 583
Bose, Jagadis Chunder (B.), 259
Boyle, H. E. G. (O.P.), 528
Bradburne, Dr A. A. (L.), 154, 354
Bradshaw, Dr. T. R. (O.P.), 442
Broad, Dr. W. H. (O.P.), 346
Bulkley, Dr. L. D. (O.P.), 640
Bunch, Dr. J. L. (O.P.), 396
Burghard, F. F. (B.), 654
Burnham Dr. F. W. E. (B.) 655
Burrows Dr. W. F. (O.P.) 498
Bury Dr. Judson S. (B.) 49
Cabot Dr. R. C. (B.) 73
Cammidge, Dr. P. J. (B.), 303
Carless, A. (O.T.), 120
Carr, F. H., (O.P.), 254
Castellani, Dr. Aldo (B.), 101
Chalmers, Dr. A. J. (B.), 101
Chaplin, Dr. A. (B.), 156
Chauffard, Dr. A. (O.P.), 173
Cheyne, Sir W. W. (B.), 654
Christian, Dr. M. (B.), 569
Clarke, Jackson (O.T.), 94, 147, 326, 351, 587, 671, 699; (L.), 707
Claude, Dr. Henri (C.L.), 664
Clouston, Sir T. (O.P.), 501
Codd, Thomas P. (L.), 22
Collie, Sir John (B.), 404, 405
Combes, Dr. Xavier (O.P.), 62
Consultant's wife (L.), 181
Cooley Dr. E. L. (O.P.), 252
Core, Dr. Donald E. (O.P.), 64
Corner, Edred (O.T.), 203, 698, 723
Cousins, Dr. J. Ward (L.), 512
Crace-Calvert, Dr. G. A. (O.P.), 37
Craig, Dr. M. (L.), 707
Cushing, Dr. Harvey (O.P.), 197
Da Costa, Surg. Capt. B. F. B. (B.), 655
Dale, Dr. H. H. (O.P.), 254
De Dominicis, A. (O.P.), 722
De Lee, Dr. J. B. (B.), 303
De Santi, P. R. W. (O.P.), 719
Doctor, A Lady (L.), 258
Doctor's Wife (L.), 154
  No. 2 (L.), 181
  No. 3 (L.), 207
  No. 4 (L.), 208
Doctor's Wife's Husband (L.) 233
Doolin Dr. W. (O.P.), 397
Dorrell, Dr. E. A. (L.), 595, 681
Duba, Dr. Ch. (O.P.), 375
Dutton, Dr. Thomas (L.), 154; (O.P.), 348
Eccles, W. McAdam (B.), 48
Eddowes, Dr. A. (L.), 484
Edmunds, Arthur (O.T.), 67, 230, 558; (B.), 654
Einhorn, Dr. Max (B.), 484
Emerson, Dr. Haven (O.P.), 418
Emery, Ch. F. (L.), 484
Evans, Willmott (O.T.), 255, 449, 645
Ewart, Dr. W. (O.P.), 89, 114, 146, 168, 195, 221
Faber, Prof. Knud (O.P.), 374
Faught, Dr. F. A. (B.), 732
Fernie, Dr. W. J. (B.), 405
Findlay, Dr. L. (O.P.), 471
Finsterer, Dr. Hans (O.P.), 472
Firth, Dr. J. Lacy, (O.P.), 581
Fletcher, Dr. Morley (B.), 48
Frankau, Claude (O.P.). 609
Froelich, Dr. (C.L.), 496
Gabriel, W. M. (L.), 432
Garré, Dr. C. (B.), 406
Garrod Dr. A. E. (B.), 209
Gib, Rev. Chas. (B.), 627
Giles, Dr. A. E. (C.L.), 440
Gilford, Hastings (O.P.), 248
Goodall, Dr. A. (O.P.), 90
Gordon, Dr. W. (B.), 484
Groves, Dr. E. W. Hey (O.P.), 316
Grulee, Dr. C. G. (B.), 783
Grünbaum, Dr. A. S. (B.), 382
Guy, W. (O.P.), 90
Gynæcologist, (L.), 208
Hall, Dr. J. W. (O.P.), 692
Handley, Sampson (O.T.), 399, 612
Hanna, Dr. W. (B.), 567
Harris, Dr. T. (B.), 102
Harrison, Dr. H. M. (L.), 48
Harrison, Major L. W. (B.), 568
Hart, A. H. (B.), 103
Hayes, M. R. J. (O.P.), 342
Hayes, Thomas (L.), 48
Hobday, F. (O.P.), 226
Hollander, Dr. Bernard (L.), 365
Hollis, Dr. W. A. (O.P.), 118
Hornsby, Dr. J. A. (B.), 304
Horsley, Sir Victor (L.), 21
Hospital Dentist (L.), 378
Hospital Nurse (B.), 305
H. S. (L.), 257
Humphreys, H. (B), 626
Humphris, Dr. F. H. (B.), 49
Hurry, Dr. J. B. (B.), 103
Hutchinson, Dr. R. (B.), 128
Hutinell, Prof. V. (C.L.), 364, 636
Hyslop, Dr. T. B. (O.P.), 585
James, W. W. (O.P.), 475, 503
Jellett, Dr. Henry (B.), 182
Jones, H. Lewis (B.), 102, 210
Joseph, E. L. (L.), 457
Joseph, Dr. G. W. N. (O.P.), 321
Judd, W. R. (O.P.), 721
Justitia (L.), 652
Keen, W. W. (B.), 406
Kellock, T. H. (O.P.), 669
Kelly, Dr. A. O. J. (B.), 155
Keogh, Dr. Myles (L.), 354
Ker, Dr. C. B. (O.P.), 637
Kermisson, Prof. E. (C.L.), 166
King, Norman C. (L.), 403
Knott, G. H. (B.), 404
Knox, Dr. Robert, (C.L.), 244
Kukula, Dr. O. (C.L.), 30
L. (L.), 402
La Fétra, L. (B.). 406
Laird, John (B.), 210
Lane, Sir Arbuthnot (C.L.), 522 (O.P.), 556
Lee, Dr. R. (L.), 566
Leftwich, Dr. R. W. (B.), 74
Legg, T. P. (B.), 654
Leslie, Dr. R. Murray (O.P.), 370
Leuhman, Sir W. (B.), 568
Lewis, Dr. T. (B.), 305
Lian, Prof. C. (O.P.), 143, 16
Loewenfeld, Dr. L. (B.), 49
Lovett, Dr. R. W. (B.), 157
Luciani, Prof. Luigi (B.), 259
Lucien, Dr. M. (B.), 156
M.A., M.D.Cantab. (L.), 626
McCrae, Dr. J. (B.), 381
McCulloch, Dr. H. D. (O.P.), 115; (L.), 431
McKendrick, A. (B.), 405
Mackenzie, Dr. J. (B.), 210
Macleod, Dr. J. J. R. (B.), 259
McNee, Dr. J. W. (O.P.), 676
McWalter, Dr. J. C. (L.), 47, 257, 380, 404, 565, 652; (O.P.), 373, 420
Marshall, Dr. C. Devereux (L.), 625
Medical Temperance Reformer (L.), 652
Melville, Col. C. H. (B.), 568
M. B. J. (L.), 353
Member, A (L.), 354
Member B.M.A. (L.), 258; Another (L.), 302
M.R.C.S. Eng. (L.), 354
Meyers, Dr. M. K. (B.), 568
Midelton, W. J. (O.P.), 422; (C.R.), 449
Mills, G. Percival (B.), 626
Minchin, Dr. W. C. (O.P.), 608
Moon, Dr. R. O. (C.L.), 314
Moorhead, Dr. T. G. (O.P.), 525
Morrow, Dr. A. S. (B.), 305
Moynihan, Sir Berkeley (O.P.), 141 (B.), 182
Munro-Kerr, Dr. J. M. (C.L.), 606
Murray, Dr. G. R. (O.P.), 116
Murray, R. W. (O.P.), 320
Musser, Dr. J. H. (B.), 155
Muthu, Dr. J. A. C. (L.), 404
Neave, Dr. Sheffield (C.L.), 138, 716
Newman, Sir G. (O.P.), 553, 609
Nisbet, J. F. (B.), 75
Nixon, Dr. J. A. (O.P.), 65
O'Brien, Dr. C. M. (O.P.), 35
Obscure Member (L.), 127, 681, 731
O'Hara H. M. (O.P.), 224
Old Radical (L.), 330, 432, 596
Oldfield, J. O. (L.), 596
Owen Dr. Sydney A. (O.P.), 318
Paine, Dr. Al. (O.P.), 394
Palmer, Dr. F. S. (C.L.), 84; (O.P.), 393
Panton, Dr. P. N. (B.), 102
Parisot, Dr. J. (B.), 156
Paterfamilias (L.), 456
Paterson, H. J. (B.), 304; (O.T.), 370
Pathologist, Working (L.), 707
Paton, Dr. D. Noel (B.), 654
Paul, F. T. (O.P.), 473
Pembrey, M. S. (B.), 381
Pfaundler, Dr. M. (B.), 406
Piquand, Dr. G. (B.), 541
Pollock, Major C. E. (B.), 568
Power, D'Arcy (O.T.), 532
Poynton, Dr. F. J. (O.P.), 394
Practitioner, An obscure (L.), 566
Practitioner, An overworked (L.), 22.
Pritchard, Dr. Eric (C.L.), 550
Quincke, Dr. H. (B.), 406
Rachford, Dr. B. K. (B.), 542
Rankin, Dr. T. T. (O.P.), 607
Reid, Dr. H. S. (O.P.), 90

Riddle, Dr. H. H. (O.P.), 643
Ritchie, Dr. J. (B.), 381; (O.P.) 423
Robertson, Dr. W. (B.), 405
Roemer, Dr. P. (B.), 305
Roepke, Dr. (B.), 183
Rolleston, Dr. H. D. (B.), 209
Ross, Dr. E. H. (L.), 732
Ross, Dr. Ronald (L.), 47
Ross, Dr. S. J. (L.), 680, 707
Rost, Major E. R. (O.P.) 349
Rostaine, Dr. P. (O.P.), 694
Roth, Paul B. (O.P.), 91, 638
Sandberg, Dr. A. G. (B.), 303
Saundby, Dr. R. (L.), 21[illegible]; (B.), 50
Savage, Sir G. H. (C.L.), 578
Sawyer, Sir James (B.), 542
Schlossmann, Dr. A. (B.), 406
Scott, J. A. (B.), 568
Scrutator (L.), 540, 681, 731
Senex (L.), 234
Sewill, Henry (L.), 100, 181, 379, 457, 512, 540
Shaw, Dr. H. L. K. (B.), 406
Shennan, Dr. Theodore (B.), 382
Sherren, James (O.T.), 17; (C.L.) 338
Smith, Dr. F. J. (B.), 405
Snowman, Dr. J. (O.P.), 12
Sociology, A student of (L.), 72
Sommerville, Dr. D. (B.), 541
Souligoux, Dr. D. (C.L.), 690
Spicer, Dr. A. (B.), 405
Stephenson, Sydney (C.L.), 58
Surveyor, Prof. N. F. (O.P.), 323
Sutherland, Dr. G. A. (B.), 26c
Swainson, r. (O.T.), 41, 478
Symphathiser, A (L.), 540
Talbot, Dr. E. S. (O.P.), 667
Tayler, J. Lionel (B.), 485
Tebb, Dr. W. S. (L.), 595
Temperance Reformer (L.), 47, 72, 403
Thompson, Dr. C. H. (B.), 306
Thompson, C. J. S. (B.), 732
Thorne, Dr. L. Thorne (B.), 155; (O.P.), 368
Thorp, Eustace (C.R.), 147
Thursfield, Dr. Hugh (C.L.), 192; (B.), 209
Tomkins, Dr. H. H. (L.), 731
Treadwell, O. F. N. (O.P.), 695
Tredgold, A. F. (C.L.), 218
Tudor, Dr. D. Mary (B.), 303
Tunnicliffe, Dr. F. W. (L.), 71
Turner, Dr. A. Logan (O.P.), 583
Tuszkai, Prof. O. (O.P.), 554
Vaquez, Dr. H. (O.P.), 88
Veit, Dr. J. (C.L.), 122
Viator (L.), 355
Walsh, Dr. David (B.), 48; (C.R.), 93; (O.P.), 443; (L.), 541
Wanklyn, Dr. W. McC. (B.), 383
Watson, Dr. B. P. (B.), 382
Watson, Dr. Malcolm (O.P.), 552
Webb, Dr. Ella G. A. (O.P.), 13
Welby, F. A., (B), 259
Wheeler. W. I. de C., (O.P.). 8
White, Dr. C, Powell (B.), 259
Willcox, Dr. W. H. (O.P.), 251
Williams, Dr. Tom A. (O.P.), 199
Williamson, C. L. (O.P.), 321
Wingrave, Dr. Wyatt (C.L.), 390; (L.), 456
Wise, Dr. Tucker (L.), 257
Wood, Dr. J. W. (L.), 595
Woodhead, Dr. G. Sims (B.), 381
Wrench, Dr. G. J. (B.), 485
Wyllie, Lt.-Col. J. A. (B.), 655
Wynter, Dr. W. Essex (C.L.), 6

CLINICAL LECTURES.

Abdominal respiratory movement and pericarditis. Dr. W. Essex Wynter, 6
Chronic Intestinal Stasis. Sir Arbuthnot Lane, 522
Diagnosis in Children. Dr. Sheffield Neave, 138
Disorders of Nutrition in Infancy. Dr. Eric Pritchard, 550
Eclampsia. Prof. J. Veit, 112
Epilepsy. Surgical treatment. Dr. O. Kukula, 30
Extra-Uterine Pregnancy. Dr J. M. Munro-Kerr, 606
Glaucoma. Sydney Stephenson, 58
Heart. Functional disorders of. Dr. R. O. Moon, 314
Meningeal Hæmorrhage in Childhood. Prof. V. Hutinel, 636
Meningeal Reactions in Poliomyelitis. Prof. V. Hutinel, 364
Mental Defect. Acquired. A. F. Tredgold, 218
Neuroses and Psychoses. Post-Influenzal. Sir G. H. Savage. 578
Osteomyelitis in Infants. Prof. E. Kermisson, 166
Pessaries *versus* Operations. Dr. A. E. Giles, 440
Pyrexia—Coughs—in Children. Dr. S. Neave, 716
Radium in Malignant Disease. Dr. R. Knox, 244
Reflexes. Dr. F. S. Palmer, 84
Reflexes. Defensive. Dr. Henri Claude, 664
Skull. Fractures of. Prof. Léon Bérard, 416
Spina Bifida. Dr. Froelich, 496
Spleen. Enlargements of, in children. Dr. H. Thursfield, 192
Ulcer, Chronic, of the Stomach and Duodenum. J. Sherren, 338
Vaccine Therapy. Dr. Wyatt Wingrave, 390
Visceral Complications in Hysterectomy. Sir J. Bland-Sutton. 468
Wounds of the Chest. Dr. D. Souligoux, 690

CLINICAL RECORDS.

Influenza and Typhus. Eustace Thorp, 147
Skin Cases. Dr. D. Walsh, 93
Vagus. Reflex Stimulation of W. J. Midelton, 449

CORRESPONDENCE—FOREIGN

FRANCE—

Aix-les-Bains, 45
Alcoholism in France, 678
Anæsthesia. Local, 510
Antigonococcic vaccine, 538
Anus. Fissure of, 401
Boils, 622
Broncho-pneumonia in infants, 43
Bubo, 178
Chlorate of magnesia, 561
Cirrhosis of the liver, 647
Colloidal sulphur, 622
Cysts of the wrist. 43
Dysentery and emetine, 177
Emphysema. Pulmonary, 703
Epilepsy, 591
Erysipelas, 178
Falling hair, 562
Flatulence, 480
Furunculosis, 400
Hæmorrhage in throat operations, 509
Intravenous injections, 728
Liver. Cirrhosis of, 206
Mushroom poisoning, 428
Otitis. Purulent, 538
Oxygen by the rectum, 592
Oxygen gas. Subcutaneous injections, 123
Pruritus, 562
Revulsives in consumption 648
Rheumatism, 677
Salpingo-ovaritis, 480
Solid carbonic acid, 622
Statistics, 428
Tetanus, 123
Tuberous abscesses of the axilla, 562
Typhoid fever, 43. Vaccination for, 537
Typhoid fever in children, 677
Ulcerations. Tuberculous, 677

GERMANY—

Addison's disease and pregnancy, 44
Aix-la-Chapelle, 207
Antrum of Highmore. Clearing out, 232
Auxautolytic material, 678
Basedow's disease and the genitals, 98
Bladder operations, 454
Blennorrhœa. Inclusion, of infants, 592
Bullet wound of lung and kidney, 648
Calculus, 401
Carcinoma and the climacteric, 232
Carcinoma. Inoperable, 207
Chronic pneumonia in an infant, 562
Constipation. Operation for, 481
Delivery and double uterus, 428
Delivery of twins, 592
Duodenal ulcer, 301
Eclampsia, 69
Exophthalmos. Pulsating, 401
Friedreich's disease, 377
Hæmorrhage from the liver. Arrest of, 153
Kidney. Suppurating. Extirpation of, 481
Larynx and pharynx. Extirpation of, 256
Lime constituents of the blood, 98
Lipoma. Retroperitoneal, 648
Mammary gland. Internal secretion, 68
Mesothorium, 232
Multi-sufferer, 704
Myomata &c., and Röntgen rays, 207, 232
Osteitis deformans, 178
Ovaries. Internal secretions of, 429
Pancreatitis. Operation for acute, 206
Peptic ulcer in duodenum, 481
Pneumothorax. Artificial, 729
Pregnancy, &c., and diseases of the heart and kidneys, 19, 44
Pulse. Arterial and venous, 124
Purgatives and astringents in children, 510
Pyelitis gravidarum, 510
Renal function and eclampsia, 43
Salivary glands. Internal secretion, 68
Salvarsan and recurrent fever 124
Salvarsan in paralysis, 256
Spasm of the pylorus in an infant, 648
Spirochætes in paralysis, 376
Stomach. Total extirpation of, 481
Subcutaneous infusion of bicarbonate of soda, 704
Syphilis of the lungs, 623
Thyroid and pregnancy, 69
Tissue change, 623
Tongue. Total extirpation of 206
Tuberculosis, 153
Urethra. Tumour of, 729
Urethroscopy, 678
Uterine contractions, 98
Uterus. Hæmorrhage from, 99
Uterus. Rupture of, 301
Women's reproductive functions and the heart, 43
Writing apparatus, 124
X-rays, 623

AUSTRIA—

Achylia. Functional pancreatic, 624
Anti-bodies, 482
Aphasia, 538
Argentum - therapy in gonorrhœa of males, 538
Argyria. Industrial, 539
Austrian Tyrol, 705
Auto-Cæsarean section, 44
Diabetes mellitus, 510, 593, 648, 679
Duodenal secretions, 454
Fatty disease, 377
Ferments found in blood of Mongolians, 429
Gastric juice. Hydrochloric acid of, 730
Hydatid moles, 352
Inequality of the pupils in visceral disease, 327
Miana bug, 482
Papaverin. Use of, 481
Pavor nocturnus, 729
Pemphigus benignus congenitus, 178
Phosphorus in rickets, 454
Pituglandol and labour, 455
Radio-activity in therapeutics, 124
Radio-therapy, 623
Radium *v.* Mesothorium, 99
Radium rays and uterine carcinoma, 44, 99; and prostatic tumours, 99
Radium treatment of internal disease, 538, of rectal carcinoma, 678
Resection of joints, 563
Salvarsan. Fatal result, 153
Serology and psychiatry, 455
Splenectomy, 20, 69
Splenomegaly and icterus, 20
Still-Chaufford syndrome, 154
Trigeminal neuralgia, 563
Whooping cough, 678

HUNGARY—

Asthma, 328
Ætiology of prolapsus uteri, 257
Basedow's disease, 624
Cardiac disturbances and disease of the biliary passages, 70
Coryza. Acute, 126
Eczema, 233
Gastric pain. Left-sided, 125
Heart. Acute dilatation of, 70
Hydrotherapeutic measures. Misuse of, 125
Lumbago, 455
Meat diet and gout, 179
Nerve anastomosis for facial paralysis, 455
Paraffin. Injection of, for incontinence of urine, 455
Pediatrics, 539
Phlebitis. Gonorrhæal, 256
Pott's disease, 378
Renal disease. Surgical intervention, 232
Syphilitic Aortitis, 257
Tabes. Transmissibility of, 378
Typhoid fever, 624

CANADA—

Canadian Medical Association. Annual meeting, 126, 179
Ontario Health Officers' Association, 45
Toronto General Hospital. Opening, 70

U.S.A.—

Clinical Congress of Surgeons, 649, 704

CORRESPONDENCE—HOME.

Aberdeen. Exhibition. Red Cross and Health Service, 706
Aberdeen. Spread of anthrax, 353
Baldovan Institute for Mental Defectives, 127

BELFAST—

Abbey Sanatorium, 431
Benn Ulster Eye, Ear and Throat Hospital, 430
B.M.A., 46, 594
District Lunatic Asylum, 680
German doctors' visit, 233,
Lindsay Golf Cup, 46
Local Medical Committee, 233, 706
Mater Infirmorum Hospital, 483
Medical Guild, 680
Queen's University, 594
Royal Victoria Hospital, 47, 483, 594; King Edward Memorial, 430
Queen's University, 594
Scarlet fever, 706
Tuberculosis officer, 512

EDINBURGH—

Appointments, 679
Asylums officers. Pensions, 564
Chair of Clinical Medicine, 455, 482
City Hospital. New pavilions for consumption, 455
Clinical teaching, 100, 429
Corporation Tuberculosis Scheme, 20
Dunlop. Presentation to Dr., 679

Eugenics Society, 564
Honorary graduates, 46
Indian students, 651, 679
Medical Benefit Associations, 594
Medical Guild, 593
Mental Deficiency Bill, 564
Menzies. The late Dr. David, 564
M.O.H., 46, 100
National Medical Union, 651
New Professor of Physics, 71
Post-Graduate Courses, 401
Royal Hospital for Sick Children, 564
Royal Infirmary, 127; insured persons in, 651
School children, 679
School of Medicine for Women, 455
Tuberculosis, 46
University, 71. Professorship of bacteriology, 99

Gartloch Mental Hospital, 482
General practice. Risks of, 651

GLASGOW—
  Alchemists, Society of, 680
  Assessorship, 539, 564, 594
  Breathing in diving, 430
  Chadwick lectures, 402
  City slums, 706
  Dental curriculum, 430
  Food and its preparation, 329
  Inclusive fee in medicine, 436
  Insurance Act, 564, 730
  Maternity and Hospital Bazaar, 564
  Maternity benefit, 652
  Medical lady militant, 430, 456
  Medical problems, 456
  Monro. Prof. Presentation to, 402
  Municipal election. Medical candidates, 483, 539
  Opening of winter session, 430
  Provan. The late Dr., 378
  Research Defence Society, 730
  Russian delegates, 207
  Salaries for assistant medical officers, 540
  Sanatoria, 329
  Sanitary congress, 329
  Surplus under medical benefit, 680
  Syphilis and insanity, 564
  Tuberculosis problem, 329
  University. Munificent bequest, 402
  Victoria Infirmary, 402, 651
  Wassermann's test and public health, 401
  Western Infirmary, 625, 730
  Workmen's Compensation Act and uncertified deaths, 402

Highlands and Islands Medical Service, 706
House. The, and health, 512
Hutchison. Dr. Alice. Dinner to, 21
Inclusive fee in Medicine. Scotland, 511
Insurance Act. Mileage grant. Medical benefit, 625
Manchester. Dinner to Prof. Delépine, 431
National Insurance Act, 46, 71; in the Highlands, 127; in Scotland, 511
Perth. Murray's Royal Asylum 482
Scottish InsuranceCommissioners. Power to prosecute, 100
Scottish Universities and the inclusive fee, 378
Ulster Medical Society, 594
University of St. Andrews. Suffragist outrage, 21

EDUCATIONAL SUMMARY.

Introductory remarks, 266
  England, 268—284
  Ireland, 284-294
  Scotland, 294-301

LABORATORY NOTES AND NEW PREPARATIONS AND APPLIANCES.

Arseno-metaferrin, 306
Citoda, 260
Dia-paraffin, 628
Hydrastinine. Bayer's, 460
Intestinal Crushing Clamp, 542
Iodo-meteferrin, 306
"Kepler" Malt Extract with glycerophosphates, 356
Metaferrin, 306
Posterior rhinoscope, 569
Romanxan, 306
"Tabloid" adjustable head dressing, 459
Tooth powder. Oriental, 260
Tricalcol, 306

LETTERS TO THE EDITOR.

Alcohol in Diabetes, 47
Alcohol question, 566, 652
Alcoholic quack medicines, 72, 100, 154
Alopecia areata. A new remedy, 354
Apex. Treatment of consumption, 234, 257
B.M.A. and its Journal, 127; financial reform, 680, 707, 731
Colour dangers, 625
"Crowner's Quest" and Medical Law, 257
Dress. A doctor's wife on, 154, 181, 207, 208, 233, 258
Drugged or drunk, 380
Ethics of Journalism, 512, 540
Faith healing at University College, 540, 681, 707, 731
Fractures of the base of the skull, 512
French drains, 301, 330, 353, 354, 379, 483
Gibson. Dr. G. A. Memorial, 72
Glycosuria. Non-diabetic, 47
Holiday field. A good, 22
Hypothyroidism, 404
Income Tax demands, 731
Infantile mortality, 22
nsurance Act and medical men, 330, 432
Intracranial tumours, 565
Lichen Planus, 484
London Hospital appointments, 652
London Medical Committee, 595
London Nerve Clinic, 566
Marriage, Birth and death rate, in 1912, 72
"Medical Advisers" in Ireland, 48
Medical men and lay press notices, 626
Medical men as dentists, 354, 378
Medical Register and certificates, 403
Medical Research, 47
Mercury. Abuse of, 21
Mount Vernon Hospital. Honorary staff, 71
National Medical Guild, 731
National Medical Union, 681
Newspapers and quackery, 403
Ozone. Some misconceptions of, 457
Panel dentists, 354
Panel system, 596
Profession. The and Trades Unionism, 258, 302
Quacks. The control of, 154, 181
Racial prejudice, 404
Radium-Mesothorium cure, 431
Railway sanitation. English, 355
Restaurant fly, 541
Rhinoscopy. Posterior, 595
R.C.S.Eng. Mr. McKenna and Sir V. Horsley, 21
R.C.S.Eng. The future of, 596
Science: Teaching of, 402, 456
Sherren's. Mr. Lecture, 379
Small-pox and vaccination, 395
Stasis. Intestinal, 566
Syphilis organism. Life cycle of, 707, 732
Syphilis specific, 652
Titles. Question of, 565
Vaccine therapy, 432, 456
Veterinary art. Overthrow of, 457
Warning from Bart's, 48
Womb. Cancer of. Is operation useless? 257
Yellow *versus* white vaseline, 483

MEDICAL NEWS IN BRIEF.

Aberdeen Health Exhibition, 708
Aberdeen Medico-Chirurgical Society, 735
A.H. Dublin dinner, 656
Alabone. The late Dr., 657
A.M.S., 515
American ward in the London Hospital, 460
Apenta water in West Africa, 50
Army medical officer. Accidental death, 237
Assault on a medical man, 356
Asylum medical officers, 597
Bar. Calls to, 571
Belfast. Queen's University, 77
Birth rate. Unusual increase, 236
B.M.A., 515
Brentford. Alleged infirmary scandal, 356
Caledonian Medical Society, 184
Cambridge. Hospital for special diseases, 76
Cancer Research. Gift for, 735
Central London Throat and Ear Hospital, 433
Child Protection Congress, 76
Cholera case. Marienbad, 331
Christian science, 597
Conjoint Examinations in Ireland, 51, 77, 129, 487, 709
Consumption. National Association for prevention, 158
Coroner and medical evidence 734
Cremation, 307
Damages for neglect to attend a panel patient, 408
Death of a famous surgeon, 356
Death of a medical man, 682
Dimock. Death of Dr., 657
Dinner to Sir A. Horne and Sir R. Woods, 656
Dollis Hill. New Hospital at, 383
Dublin. Royal Hospital for Incurables, 76
Dublin. Visit of German doctors, 236
Edinburgh. Chair of Clinical Medicine, 461
Edinburgh Royal Infirmary, 433
Electrolysis in lead poisoning, 460
Empire Hospital. Opening of, 682
Enteritis at an infirmary, 356
Enteritis from a dust heap, 236
Epsom College, 23
Esperanto Medical Association, 76
Eugenics Congress. The next, 237
Fatal fall of a medical man, 407
Fire in a hospital, 657
Florence Nightingale Memorial, A, 407
French surgeon. Death of a famous, 486
Fund for medical students, 514
Gift to a hospital, 735
Glasgow. Anderson's College Medical School, 105
Glasgow. New Laboratory, 407
Guild of St. Luke, 486
Hampstead Health Institute, 657
Haslar Royal Hospital, 460
Highland Medical Service, 211
Hospital Sunday Fund, 157, 708
House fly extermination, 211
Hutchinson's. Sir Jonathan. Will, 237; Museum, 460
I.M.S., 129
Incorporated Association of Hospitals, 543
Infant mortality and model dwellings, 50
Infant mortality. Prevention of, 461
Inoculation. Anti-typhoid, 237
Institute of Hygiene, 570
Insurance Act Inquiry, 683
Insurance claim. A false, 261
International Tuberculosis Conference, 486
Irish Medical Committee, 261
Irish Medical Schools and Graduates Association, 514
King Edward VII. Memorial in Guiana, 236
King's College Hospital. Closing of, 76. Medical School, 184. Annual dinner, 408. The new 515
Lister Memorial, 734
London Hospitals. Cost of, 331
London Lock Hospital, 542
L.S.A., 159, 237, 487, 629, 706
London Medical Referees, 486
London School of Clinical Medicine, 628
London School of Medicine for Women, 570
Malingering by Insured persons, 237
Mary Kingsley Medal, 570
Massage houses, 597
Medical lectures. Free, 50
Medical Man. Fatal Accident to, 708
Medical man found dead, 487
Medical man sentenced, 629
Medical Mayors, 543
Medical missionaries. Death of four in China, 104
Medical scholarship. A new, 185
Medical schools. Opening of, 307
Medical Sickness and Accident Society, 23, 128, 383, 486, 656
Medical Women. Association of Registered, 735
Medicine. Early books on, 157
Merthyr Tydvil. Sanatorium, 543
Middlesex Hospital Medical School 211, 408
Mosquitoes in Epping Forest, 383
National Association for the Prevention of Infant Mortality, 128
National Medical Union, 735
New disease in the Sudan, 570
Non-panel doctors, 50, 570
Non-panel medical societies, 543
Norfolk and Norwich Hospital, 460
Ophthalmic Hospital. Central London, 104
Out-patients' departments. Reopening, 261
Panel doctors' certificates, 629
Patent medicines. Sale of, 211
Pictures for London hospitals, 356
Plague in East Africa, 331
Portland. Duke of. Gift to a hospital, 682
Practitioner. An unqualified fined, 307
Prison medical officer. Attack on, 185
Robbery at medical man's house, 331
Rotunda Hospital, 570
Royal Academy of Medicine in Ireland, 433
R.A.M.C., 185
R.A.M. College awards, 515
Royal Automobile Club as Territorial Hospital, 543
R.C.P.A.S., 158
R.C.P.Edin., R.C.S.Edin., and R.F.P.&S.Glasgow, 105, 433, 487
R.C.P.I., 487
R.C.P.Lond., 159, 515
R.C.S.Edin., 105, 461, 709
R.C.S.Eng., 75, 158, 211, 433, 571, 599, 683
R.C.S.I., 129, 157, 184, 409, 709
Royal Institute of Public Health, 331, 515
Royal Medical Benevolent Fund, 433
Royal Medical Society, Edinburgh, 543
Royal Sanitary Institute, 461, 571
Royal Society of Medicine. Section of Odontology, 407
St. Bartholomew's Hospital and College, 383
St. Mary's Hospital Medical School, 383
St. Thomas's Hospital, London, 159
Salvarsan. Death after, 185
Sanatoria at Farnham, 331
Scarlet fever in Birmingham, 407
Scholarships. Medical, 408
School children. Medical treatment of, 158
School dental clinics, 683
Seventeenth International Congress of Medicine, 184
Sickness Benefit and the Departmental Committee, 261
Sleeping sickness. Inquiry opened, 461
Small-pox in New South Wales, 51, 185
Society for the Relief of Widows and Orphans of Medical Men, 104, 460
Society of Medical Officers of Health, 461
Suicide of a medical man, 657
Sunlight. Artificial, for cripples, 307
Swanzy. Sir H. R. Proposed Memorial, 23
Temperance Hospital. London. Appointments, 211
Throat Hospital Jubilee, 307
Tranmere. A new hospital at, 515

Trinity College. Dublin, 51, 515, 571, 657
TROPICAL MEDICINE—
  Australian Institute, 76
  Far Eastern Association, 543
  London School, 185, 407, 543 735
Tuberculosis. County Sanatoria 211
Tuberculosis in Birmingham, 408
Tuberculosis in the Isle of Wight, 383
Typhoid near Rochester, 261
University College Hospital, 460
University of Aberdeen, 77
University of Bristol, 77, 105
University of Cambridge, 105, 159, 461, 629, 657, 709
University. Dublin, 23, 735
University. Durham, 51
University of Edinburgh, 77, 105, 433, 709
University of Glasgow. Large bequest, 407. Pass list, 409
University of Liverpool, 709
University of London, 129, 597, 657, 709
University. National, of Ireland 570, 709
University. Oxford, 51, 159, 461, 571, 683, 709
University. St. Andrews, 76
University of South Wales. Gift of a medical school, 104
Unqualified medical practice, 260
Vaccine therapy at U.C.H., 105
Veronal. Fatal overdose, 261
Wasp sting. Death from, 237
Welsh National Memorial to King Edward, 129
West London Medico-chirurgical Society, 23
Will. Medical man's, 629
Women's Hospital for Children, 683
Women's Medical College, 261
Woods. Sir Robert. Honorary degree, 23

NOTES AND COMMENTS.

Admission diagnosis, 685
" Alexandra Rose Day," 264
Amateur doctoring, 187
Anæsthetic room, 492
Anti-vivisectionists. A misfortune to, 464
Awkward dispute, 711
Bad air. Alleged, in Tube railway, 108
Bengal Excise folly, 685
Biplane looping, 711
Black doctor. A, 333
Bogus medical practitioner, 79
B.M.A. Brighton meeting, 107. Wandsworth resolution, 385
Buried talent, 134
Camberwell again, 491
Children's Act and surgical operations, 686
Cholera in Europe, 333
City without flies, 518
Clerks and death traps, 334
Coffin-shaped tablets, 213
Coroner and medical evidence, 712
Council reforms, 385
Debility a disease ? 711
Dental students' strike, 685
Dublin Hospital. Attack on, 134
Dunlop's. Dr. Side of the question, 386
Eastbourne excursion, 108
Enlightened and intelligent, 517
False medical certificate. Alleged, 574
False medical certificates, 631
Fighting medical officer, 79
French drains, 239. Sanitation, 309
General and Union hospitals. Transfer of patients, 161
Government moves, 187
" Hardy Annuals " at R.C.S.Eng. 546
Horsley. Sir V. and R.C.S., 1
Hospital appointments, 263
Hospital funds, 264
Hunger strike, 411
Hysteria or meningitis, 239
Infection in books, 712
International Congress of Medicine, 133
Jelley. Dr., in the public eye, 334
King Edward's Hospital Fund, 683
Koch. Dr. F., of Berlin, 133
L.G.B. mouse, 573
Life of panel doctor, 545
London is not safe from cholera, 333
London University. Future site of, 80
Malingering under the State Insurance, 1, 2
Medical books, 263
Medical certificates. Wording of, 79
Medical man vindicated, 659
Medical martyrs, 632
Medical museum, 263
Medical Poet Laureate, 79
Medical Portraits and Proprietary Advertisements, 386
Medical Register. The, 385
Medical science. Measurement in, 25
" Medical specific. A new," 463
Medicine and the public, 107
Militants and medical men, 411
Motor traffic danger, 659
Mountains in labour, 573
National Medical Union, 601, 631
Neology in medicine, 265
Non-panel men and their pledges, 631
Notification, 463
Optician " doctor," 240
Panel dentists, 264
Patients of moderate means, 686
Paying patients in voluntary hospitals, 435
Poetess on surgery, 240
Prenatal restaurant, 239
Princely gift, 26
Public health and the Congress, 161
Public memorial to a medical practitioner, 310
Queen's Square Hospital. Prosecution of, 435
Radium. A corner in, 411
Radium for hospitals, 659
Railway sanitation, 385
Reading character, 264
Revolt. A cause for, 601
Ross. Sir Ronald, and the Medical Research Committee, 1
R.C.S.Eng., 601
Royal Commission. The suggested 161
Sackville probate verdict, 53
Sanatoriophobia, 213
Sandwich and Sandow, 517
Sandwich Institute, 545
Scarlet fever, 632
Scarlet fever convalescence, 545
Sea-side. Medical benefit, 25
" Should the doctor tell ? " 265
Sleeping sickness. Extermination of, 2
Small hospitals, 263
Southwark *versus* Camberwell, 359, 436
Speed limit and medical men, 573
" Stock mixture." The, 187
Suffragette. The eternal, 411. Progress, 463
Suffragettes and Sir Victor, 573
Syphilis and Salvarsan. Discussion, 309
Third party examination, 686
Tortoise bacilli boom. 660
Travelling health museums, 213
Tuberculosis in the Isle of Wight, 53
Tuberculosis officer, 264
Unqualified practitioner with a title, 517
Untrained dentists, 685
Venereal disease. Control of, 213
Warning, 601
Whooping cough. Cure of, 25
Will to live, 602
Wisbech demonstrations, 492, 517
World's tuberculosis campaign, 463
York County Hospital, 491

NOTES ON CURRENT TOPICS.

Acta virumque, 136
Actinomycosis in ox-tongues, 715
After this the deluge, 362
Agnosticism. The new, 336
Alopecia Areata, 190
Ambulance Service for London, 633
Ammoniacal diaper, 548
Analytical idea. The, 312
Anatomy. Unnecessary, 714
Anthrax. Committee on, 519
Anticlimax. An, 165
Antidote slips, 28
Ascendancy of the mediocre, 336
Astrology in medicine, 519
Asymmetry. Human, 4
Atrocities, 135
Beit Fellows. The new, 688
Biochemistry. The progress of, 336
Blindness in tabes, 521
Boric acid in sausages, 413
Bread and water diet, 438
Bristol University, 521
B.M.A., 713
B.M.A. and Ireland, 663
Butter of our grandfathers, 136
Cancer. Diagnosis of, 520
Cardiff and hospital appointments, 548
Careless, 414
Celluloid dangers, 662
Chauffeurs. Medical inspection of, 439
Child mortality. Decline in, 110
Chronic diseases, 4
Cinematograph in medical education, 412
Cocaine anæsthesia and unregistered practitioners, 311
Cocaine snuff, 634
Colloids, 191
Colour dangers, 575
Consumption, Prevention of, 82
Consumptive lodger. Problem of, 5
Cooking for health, 387
Coroner on laudanum, 361
Crime. Modern comprehension of, 164
Crime waves, 135
Crooked path. Making plain the, 312
Cross questions, 163
Damages against a panel doctor, 389
Deficiency diseases, 635
Dermatographia, 576
Desperate remedies, 439
Deutschland ueber Alles, 82
Diachylon. Should it be scheduled, 217
Diarrhœa, 548
Diarrhœa. Epidemic among infants. Prevention of, 110
Dirty Dublin, 362
Doctoring, 603
Dried milk. The use of, 336
Dripping. The real, 387
Drug. A new, 217
Dublin. Housing in, 494
Dublin. Housing inquiry, 577
Dublin. The condition of, 415
Duodenal ulcer, 55
Dust heaps. Dangers of, 215
Easton syrup poisoning, 55
Enuresis. Nocturnal, 548
Epithelioma, 190
Etherington Smith memorial, 29
Examen, 136
Examinations and research, 438
Examinations and examiners, 547
Expectoration. Complete examination of, 56
Experiments on living animals, 335
Family doctor, 605
Fatigue. Causes of, 604
Favus and immigrants, 337
Ferments and the washtub, 28
Flies as carriers of infection, 413
Fractured skull, 604
Gastric ulcer and the baicllus coli. 216
General paralysis, 547
Ghosts, 3
Glass workers and cararact, 547
Green vegetables and diarrhœa, 313
Grinders' phthisis, 388
Hatpin. The unprotected, 663
" Here's a skull now," 190
Hodie Vacandi, 28
Holiday resorts and insanitary conditions, 241
Hospital journals, 634
Hutchinson's. Sir Jonathan. Museums, 243
Hysteria. Recognition of, 519
Ills that flesh is heir to, 165
Impurities in food and drink, 241
Incipient insanity, 603
India. Medical needs of, 388
Indian army. Health of, 577
Industrial diseases. Compensation for, 243
Influenza upon virgin soil, 335
Insurance committees in Ireland, 111
Intra-abdominal pressure in pregnancy, 576
Ireland. Milk supply of, 495
King's College Hospital. The new, 109
Leaders. Our, 56
Learning and teaching, 362
Leech. The dying, 335
Leprosy and modern research, 83
Leprosy in the British Empire, 575
Leucocyte extract in erysipelas, 415
Literary medical men, 388
Logical conclusion, 387
London fogs, 466
Lying-in institutions. Municipal control of, 494
Mash that mosquito, 191
Medical certification in Ireland, 4
Medical knowledge. Growth of, 191
Medical men's hobbies, 4
Medicinal plants. Cultivation of, 111
Medicine in ancient Greece, 687
Mental disease. Research in, 437
Merry heart. The, 312
Micturition. Physiology of, 361
Mortality among negroes, 714
Mosquito campaign near London, 362
Mount Vernon Hospital staff resignations, 81
Mussels and health, 363
Nastin in leprosy, 520
National association for the prevention of consumption, 82
National medical guild, 687
Navy. Health of, 603
Newcastle (Ireland) hospital, 604, 633
Neurasthenia, 576
Newgenics, 437
Newspapers. Food in, 466
Noble simplicity, 189
Novel pathology, 688
Nurse, 216
Nursery school, 82
Occupation. Diseases of. International congress, 28
Olfactory sense in medicine, 164
Open-air schools, 520
Ophthalmological congress, 1913, Oxford, 57
Opium in China, 164
Oxygen. Subcutaneous, 190
Oysters in health and disease, 216
Ozone. Does it purify the air ? 414
Panel doctor. Views of, 28
Pathology as professional work, 689
Paths of glory, 242
Pediculosis capitis amongst school children, 438
Plumber of the future, 714
Post-graduate study, 662
Prescription. The predominant, 494
Prescriptions. Abuse of, 135, 662
Proprietary medicines. Use of, 242
Ptosic Hamlet. 633
Puerperal Fever. Prevention, 56
Rags and bones, 312
Railway sanitation, 634
Rheumatoid arthritis, 189
Rob. The, 3
Roi malgre lui, 57
Round the circle, 414
R.C.S. Eng. Annual election, 27 ; the calendar, 467
Royal Sanitary Institute, 389
Royal Society of Medicine, 337
Salol in dentifrices, 467
Salvarsan fatalities. Pathogenesis of, 217
Salvarsan in anthrax, 413
Sanatorium benefit, 56
Sanitation in Panama, 311
School medical service, 242
Sea bathing and health, 110
Season's eatings, 714
Sexes. Psychology of, 466
Sex hygiene, 520
Smoke Helmets. Use of, 575
Sore labour's bath, 136
Speeding up, 494
Spirochætes. Cultural study of, 465
Spitting, 216
Sport and health, 662
Sterilisation of the fit, 575
Sun's rays, effects of exposure to, 242
Swanzy. Memorial to Sir Henry 56

Taxi habit, 688
Tea. Craving for, 604
Then as now, 387
Things we say, 110
Trypanosome infection. Prevention of, 136
Tuberculosis. A new danger, 363
Tuberculosis in England and Wales, 687
Tuberculosis. Institutional treatment, 549
Typhoid vaccination, 189
University education in London, 388
Vaccine. A new for gonorrhœa, 414
Vivisection of dogs, 165
Waiting room. The medical, 438
Wisbech and the death of Dr. Dimock, 634
Workers. Medical examination of, 163
X-rays in gastric ulcer, 3; and kidney conditions, 466
Yellow bacteriology, 82
Yellow versus white vaseline, 164

OBITUARY.

Anderson Dr. T., 258
Bowles. Dr. R. L., 566
Brown. Dr. J. H., 732
Buszard. Dr. Frank, 330
Carpenter. Dr. A. B., 484
Clark. Andrew, 302
Eastwood. Dr. L., 234
French. Major H. C., 458
Godson. Dr. Clement, 626
Hutchinson. Sir Jonathan, 22
Jones. Sydney, 682
Knowles. Dr. E., 541
Langley. Hon. W. H., 101
Linton. Dr. J., 513
McAllum. Dr. Duncan, 355
McBurney Dr. C., 567
Macmillan. Dr. John, 432
Martin. Dr. Matthew, 458
Middlemiss. Dr. G., 182
Miller. Dr. F. M., 208
Morris. Dr. C. K., 330
Nettleship. E., 513
Newman. Col. J. H., 732
Nix. Dr. E. J., 355
O'Donovan Dr. J., 682
Parsons. Dr. H. F., 513
Preston. Deputy Inspector-General, T. J., 652
Ritchie. Lt.-Col. J., 432
Ross. Dr. F. W. Forbes, 355
Swallow. Dr. J. D., 484
Sweeting. Dr. R. D., 541
Tennent. Dr. G. P., 355
Tuke. Sir J. Batty, 458
Whitehead. W., 234
Willett. Alfred, 48
Williams. Dr. James, 380
Young. Dr. T. B., 708

OPERATING THEATRES.

BIRKENHEAD CHILDREN'S INFIRMARY—
  Cavernous sinus thrombosis, 459
BOLINGBROKE HOSPITAL—
  Cut throat, 478
  Irreducible femoral hernia, 41
  Septic peritonitis and pregnancy, 479
GREAT NORTHERN CENTRAL HOSPITAL—
  Rhinophyma, 67
  Ruptured urethra, 230, 558
HAMPSTEAD HOSPITAL—
  Abdominal cases, 94
  Cases, 147
  Colectomy, 671, 699
  Gynæcological operations, 326, 351
HOSPITAL FOR SICK CHILDREN GREAT ORMOND STREET—
  Congenital dislocation of the hip, 698
  Nearthrosis, 723
KING EDWARD MEMORIAL HOSPITAL, EALING—
  Strangulated Meckel's diverticulum, 120
LONDON HOSPITAL—
  Gastro-jejunostomy, 17
LONDON TEMPERANCE HOSPITAL—
  Pyosalpinx and dermoid ovarian cyst, 376
MIDDLESEX HOSPITAL—
  Appendicitis, 612
  Intestinal obstruction, 399
ROYAL FREE HOSPITAL—
  Carcinoma of the breast, 255
  Epithelioma of the tongue, 449
  Hydrocele, 645
  Resection of thyroid, 424
ROYAL NATIONAL ORTHOPÆDIC HOSPITAL—
  Operation for deformity, 587
ST. BARTHOLOMEW'S HOSPITAL—
  Appendicostomy, 532
ST. MARK'S HOSPITAL—
  Procidentia recti, 176
ST. THOMAS'S HOSPITAL—
  Carcinoma of undescended testis, 203
  Hæmarthus, 723
WEST LONDON HOSPITAL—
  Plastic operation, 507

ORIGINAL PAPERS.

Accidents caused by the electric current. Dr. Paul Rostaine, 694
Alcohol. Sir T. Clouston, 501
Anæmia, achylia, and gastritis chromica. Prof. Knud Faber, 374
Anæsthesia. Intratracheal methods. H. E. G. Boyle, 528
Anæsthesia. Leucocyte count. Drs. W. Gay, A. Goodall and H. S. Reid, 90
Aphthous fever. Dr. C. M. O'Brien, 35
Arthritis deformans. W. J. Midelton, 422
Bacterial infections. New method of treatment. Prof. N. F. Surveyor, 323
Bacteriology. Its place among the sciences. Dr. J. Ritchie, 423
Breast feeding of infants. Dr. Ella G. A. Webb, 13
Breast milk. Dr. H. H. Riddle, 643
Brighton. Medical history of. Dr. W. A. Hollis, 118
Carbon dioxide in skin affections. Dr. J. L. Bunch, 396
Circumcision. J. H. Kellock, 669
Cow's milk for infant feeding. Dr. D. M. Barcroft, 196
Diseases communicable from animals to man. F. Hobday, 226
Diverticula in the large intestine. R. W. Murray, 320
Ductless glands. Hastings Gilford, 248
Duodenal ulcer. Dr. Xavier Combes, 62.
Epithelioma. Varying degrees of malignancy. F. T. Paul, 473
Ergot and its preparations. F. H. Carr and Dr. H. H. Dale, 254
Feeble-minded criminial. O. F. N. Treadwell, 695
Fractures. Repair of. Dr. E. W. Hey Groves, 316
Gall-stones. Dr. J. W. McNee, 670
Gifts of surgery to medicine. Sir Berkeley Moynihan, 141
Greater medicine. Dr. H. Cushing, 197
Hæmatemesis. Dr. Donald E. Core, 64
Hallux Valgus. A. S. Blundell Bankart, 33
Health of children. Supervision of. W. W. James, 475, 503
Heredity and skull form. Dr. W. H. Broad, 346
Hilus tuberculosis. Dr. R. Murray Leslie, 370
Human development. Dr. E. G. Talbot, 667
Hydatid disease. H. M. O'Hara, 224
Hypnoptics. Dr. W. H. Willcox, 251
Hysteria. Dr. Tom A. Williams, 199
Inducing premature labour in excessive vomiting and heart disease. Prof. Odon Tuszkai, 554
Infantile paralysis. Dr. P. B. Roth, 91
Infectious arthritis. Dr. E. L. Cooley, 252
Inflammations. Acute of the throat and neck. P. R. W. de Santi, 719
Internal secretion in disease. Dr. G. R. Murray, 110
Intestinal kinks. W. I. de C. Wheeler, 8
Intestine. A pathway of infection, Dr. L. Findlay, 471
Intracranial tumours. Dr. T. G. Moorhead, 525
Isolation and quarantine. Dr. C. B. Ker, 637
Leprosy bacillus. Major E. R. Rost, 349
Leucocyte. History and origin. Dr. H. D. McCulloch, 115
Lichen planus. Dr. D. Walsh, 443
Malaria. Prevention of. Dr. Malcolm Watson, 552
Malingering. Dr. F. S. Palmer, 393
Mediastinitis. Chronic. Prof. C. Lian, 143, 169
Micro-organisms. Are they the demons of the ancients? Dr. J. H. Alexander. 229
Mixed infections. Dr. J. W. Hall, 692
Nasal discharge and vaccines. Dr. A. Logan Turner, 583
Nauheim treatment in England. Dr. L. Thorne Thorne 368
Necropsy in every case of death. Dr. J. C. McWalter, 420
Neo-Salvarsan. Dr. J. A. Nixon, 65
Nephropexy. J. Lacy Firth, 581
Omnopon. C. L. Williamson and Dr. G. W. N. Joseph, 321
Open-air school. The. Sir G. Newman, 553, 609
Peptic ulcer. Dr. T. R. Bradshaw, 442
Phlebitis. Dr. H. Vaquez, 88
Phylacogen in polyarticular rheumatism. W. R. Judd, 721
Piles. Dr. Ch. Duba, 375
Pleurogenic reflexes in the limbs. Dr. Hans Finisterer, 472
Polio-encephalitis and polio-myelitis. Dr. F. E. Batten, 445
Presidential address. Sir T. Barlow, 171
Prognosis. Dr. A. Chauffard, 173
Psychiatry. Clinical. Dr. Theo. B Hyslop, 585
Pulmonary consumption. Dr. W. Ewart, 89, 114, 146, 168, 195, 221
Pulmonary tuberculosis. Dr. W. C. Minchin, 608
Pyelitis. Claude Frankau, 609
Revivification. Dr. A. de Dominicis, 722
Rheuish surgery. Dr. W. Doolin, 397
Rheumatism. Acute. Drs. F. J. Poynton and Al. Paine, 394
Scoliosis. Dr. P. B. Roth, 638
Stasis. Intestinal. Sir Arbuthnot Lane, 556
Stasis. Post-operative intestinal nd the use of oil. Dr. W. F. Burrows, 498
State endowed hospitals and medical service. Dr. J. C. McWalter, 373
Status lymphaticus in adults. Dr. Haven Emerson, 418
Syphilitic diseases of joints and bones in childhood. Dr. S. A. Owen, 318
Therapeutics. Dr. J. Snowman. 12
Tuberculous joints and iodine. Dr. Thomas Dutton, 348
Tuberculous meningitis. Dr. G. A. Crace-Calvert, 37
Urinary antiseptic. A new. Dr. T. T. Rankin, 697
Urine and skin diseases. Dr. L. D. Bulkley, 640
Vaccine therapy. Dr. D. M. Alexander, 529
X-rays and the intestinal tract. M. R. J. Hayes, 342

PERSONAL.

5, 29, 57, 83, 111, 137, 165, 191, 217, 243, 265, 313, 337, 363, 389, 415, 439, 467, 495, 521, 549, 577, 605, 635, 663, 689, 715

REPORTS AND ARTICLES (SPECIAL.)

B.M.A. eighty-first annual meeting, 97, 121, 149, 176
Croydon mental hospital, 380
G.M.C., 601—622
International medicine congress, 151
Irish milk supply, 514
Leprosy in South Africa, 209
Lunacy in Ireland, 458
Medicine in the canal zone, 380
Medico-mechanical treatment in England, 231
Nathan Strauss and pasteurised milk, 567
National medical guild, 701
Pasteur Institute. Twenty-fifth anniversary, 622
Plumbers' Company, 727
Report of the Registrar-General for Ireland, 73
Research Defence Society, 653
R.C.S. Eng. 567
Scott's (Capt.) expedition. Medical equipment, 380
Seventeenth International Congress of Medicine, 177, 204, 231
Venereal diseases. Royal Commission on, 596, 653, 703

REVIEWS OF BOOKS AND LITERARY NOTES.

Anæsthetics. Dental. Dr. W. E. Alderson and J. Bolam, 626
Anesthésie locale. Dr. G. Piquand, 541
Asthma. Dr. James Adam, 485
Barts' reports. Dr. Morley Fletcher and W. McAdam Eccles, 48
Benger's food, 627
Blood pressure. Dr. F. A. Faught, 732
Children. Diseases of. Drs. M. Pfaundler and Schlossmann, translated by Drs. H. L. K. Shaw and L. La Fétra 406
Children. Diseases of. Dr. R. Hutchinson, 128
Children. Diseases of. Drs. A. E. Garrod, F. E. Batten and H. Thursfield. 209
Children. Diseases of. Dr. B. K. Rachford, 542
Children. Diseases of. Dr. G. A. Sutherland, 260
Climatology. Dr. W. Gordon, 484
Clinical medicine. Dr. Judson S. Bury, 49
Colour vision. Sir W. Abney, 74
Conjugal happiness. Dr. L. Loewenfeld, 49
Consumption. Dr. G. H. Thompson, 306
Dental surgery. G. P. Mills and H. Humphreys, 626
Diabetes. Dr. J. J. R. Macleod, 259
Diagnosis. Tabular. Dr. R. W. Leftwich, 74
Disinfection and disinfectants. Dr. M. Christian, 569
Drug Bill. How to cut it. A. H. Hart, 103
Duodenal ulcer. Sir B. Moynihan, 182
Electricity. Medical. H. Lewis Jones, 102
Electro-cardiography. Dr. Thomas Lewis, 305
Electro-therapeutics. Dr. F. Howard Humphris, 49
Existence. Dr. I. Harris, 102
Fœtus. Malformations and diseases. Prof. R. Birnbaum, translated by Dr. G. Blacker, 382
Food and feeding. Dr. Chalmers Watson, 655
German-English medical dictionary. Dr. M. K. Meyers, 568
Glycosuria. Dr. P. J. Cammidge, 303
Gynæcology. Dr. A. H. F. Barbour, 382
Gynæcology. Dr. E. Ashton, 304
Gynæcology. Aids to. Dr. Jervois Aarons, 103
Hæmocytes and hæmic infections. Dr. F. W. E. Burnham, 655
Infant feeding. Dr. C. G. Grulee, 183
Insanity of genius. J. F. Nisbet, 75
Tonic medication. Dr. H. L. Jones, 210
Liver. Diseases of. Dr. H. D. Rolleston, 209
Lungs. Tumours of. Dr. J. Adler, 183

Marriage. The healthy. Dr. G. T. Wrench, 485
Medical partnerships. W. Barnard, 103
Medico-legal books. Sir John Collie, G. H. Knott, Drs. W. Robertson and A. McKendrick, Dr. F. J. Smith, A. H. Spicer, 404, 405
Metabolism. Dr. D. Noel Paton, 654
Midwifery. Dr. H. Jellett, 182
Modern hospital. Dr. J. A. Hornsby, 304
Napoleon Bonaparte's fatal illness. Dr. Arnold Chaplin, 156
Nauheim treatment of heart diseases. Dr. L. Thorne Thorne, 155
Obstetrics. Dr. J. B. De Lee, 303
Old age. Care of. Dr. R. Saundby, 50
Ophthalmology. Dr. P. Roemer 305
Our outsides. Dr. W. T. Ferne, 405
Pathology. Clinical. Dr. P. N. Panton, 102
Pathology. Works on. Dr. G. Sims Woodhead. Drs. J. G. Adami and J. McCrae. M. S. Pembrey and J. Ritchie. Dr. J. M. Bernstein. Dr. A. S. Grünbaum. Dr. Theodore Shennan, 381, 382
Pericardial effusion. Dr. G. Blechmann, 303
Pharmacopœias. C. J. S. Thompson, 732
Pharmacopœias. Provincial hospitals, 568
Physical diagnosis. Dr. R. C. Cabot, 73
Physiology. Luigi Luciani and F. A. Welby, 259
Plant researches. Jagadis Chunder Bose, 259
Practical medicine. Sir James Sawyer, 542
Public Health. Dr. D. Sommerville, 541
Royal Academy of Medicine in Ireland. J. Alfred Scott, 568
Sea water injections. Drs. A. G. Sandberg and D. Mary Tudor, 303
Sexual philosophy. Dr. J. L Chundra, 406
Skin. Diseases of. Dr. David Walsh, 48
Sleeping sickness. Surg.-Capt. B. F. B. da Costa, translated by Lt.-Col. J. A. Wyllie, 655
Small-pox. Dr. W. McC. Wanklyn. 383
Small-pox and vaccination. Dr. W. Hanna, 567
Spine. Lateral curvature of. Dr. R. W. Lovett, 157
Stitch in time. Hospital graduate nurse, 305
Stomach. Diseases of. Dr. Max Einhorn, 484
Supra-renal glands. Drs. M. Lucien and J. Parisot, 156
Surgery. W. W. Keen, 406
Surgery of the lung. Drs. C. Garré and H. Quincke, translated by Dr. D. M. Barcroft, 406
Surgery of the stomach. Herbert J. Paterson, 304
Surgery. Operative. J. F. Binnie, 74
Surgical treatment. Sir W. W. Cheyne, F. F. Burghard, T. P. Legg, Arthur Edmunds, 654
Symptoms. Dr. J. Mackenzie, 210
Technique. Dr. A. S. Morrow, 305
Treatment. Drs. J. H. Musser and A. O. J. Kelly, 155
Tropical medicine. Drs. Aldo Castellani and A. J. Chalmers, 101
Tuberculosis. Dr. J. Laird, 210
Tuberculosis. Drs. Baudelier and Roepke, 183
Tumours. Dr. C. Powell White, 259
Venereal diseases. Manual of. Cols. C. H. Melville, Sir W. Leuhman, Majors C. E. Pollock and L. W. Harrison, 568
Vicious circles in disease. Dr. J. B. Hurry, 103
Vocal expression. Rev. Chas. Gib, 627
Woman. The nature of. J. Lionel Tayler, 485

SUMMARY OF MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Anæsthesia, local, in fractures and dislocations, 131
Ankle clonus, 130
Cæsarean section, 488
Cerebral syphilis, 598
Cough, nauseating, in phthisis, 131
Diphtheria carriers. Treatment of, 130
Duodenal ulcer in infancy, 236
Eclampsia, 488
Ectopic pregnancy, 131
Emptying the uterus and eclampsia, 488
Endocarditis and operations, 733
Enteric fever and water disinfection, 733
Esthiomerie or lupus vilvæ, 488
Gastric ulcer and gastric cancer, 733
Hæmic infections of the urinary tract, 599
Hair ball in the stomach, 357
Heart in syphilis, 598
Inguinal hernia. Radical cure, 734
Inoperable cancer, 599
Labour pains, 598
Local anæsthesia, Nose and throat, 357
Menstrual molimina, 235, 489
Miner's nystagmus, 357
Pituitary extract, 598
Pituitary gland. Extract of, 235
Pneumonia and specific serums, 489
Poliomyelitis. Anterior, 235
Pregnancy and affections of the heart, 733
Pregnancy. Extra-uterine, 488; a positive sign of, 489
Proctolysis, 131
Pylorus. Stenosis of, 489
Renal tumour, 236
Salvarsan, 598
Scars, 734
Second sound. Reduplication of, 130
Stomach. The position of, in children, 489
Threadworms in the peritoneal cavity, 235
Thrombo-phlebitis. Puerperal, 734
Tuberculosis and pregnancy, &c., 130
Typhoid ulcer. Perforated, 599
Urinary antisepsis, 357
Uterine casts, 235
Uterine hæmorrhage and Röntgen rays, 235
Vaccines in enteric fever, 489

TRANSACTIONS OF SOCIETIES.

British Oto-laryngological Society Cases, 96, 537, 726.
Clinical meeting, 43
Radio-active agencies, 537
Suppurating ears, 537

Central Midwives Board—
Abnormal cases, 123
Correspondence, 123, 591
Insurance Act and Midwives Act, 453

Edinburgh Medico-Chirurgical Society—
Cases, 590. Eugenic Reform, 507
Fibro-sarcoma. Orbital, 41
Heart. Conduction defects in, 41
Intestinal toxæmia, 42
Isolation and quarantine, 646
Supra-renal glands, 536
Glasgow Medico-Chirurgical Society—
Auricular flutter, 479
Cases, 677
Dilatation of the stomach (Presidential Address), 426
Gall stones, 677
Intestine a pathway of infection, 480
Malaria. Prevention of, 561
Harveian Society of London—
Cases, 479. Fractures about the elbow joint, 561
Infections, 701
Tuberculous sputa, 561
Venereal diseases, 647
Liverpool Medical Institution—
Anæsthetist. The, 508
Appendix abscess, 615
Blackwater fever and malaria, 727
Enucleation of the tonsil, 508
Intestinal obstruction, 480
Labyrinth. Diseases of, 508
Lane kink, 615
Modern clinical teaching, 561
Rectal cancer, 591
Specimens, 590, 727
Venereal diseases, 615
New London Dermatological Society—
Cases, 18, 95, 452, 614, 724
North of England Obstetrical and Gynæcological Society
Cases and specimens, 509, 647
Royal Academy of Medicine in Ireland—
Medicine, 536, 726
Obstetrics, 17, 675
Pathology, 613
Surgery, 700
Royal Society of Medicine—
Clinical section, 425, 588, 672
Diseases in children, 533, 699
Obstetrics, &c., 68, 450, 558, 674
Ophthalmology, 534, 645
Ulster Medical Society—
Diseases of ear, nose, &c., 616
Incapacity following injury, 509
West London Medico-Chirurgical Society—
Clinical evening, 559
Presidential address, 400

Jelicy
King
683

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, JULY 2, 1913. NO. 1.

NOTES AND COMMENTS.

Sir Ronald Ross and the Medical Research Committee. MEDICAL men are as a rule reticent and guarded in their speech. This habit has probably become ingrained in them to some extent because of the progressive nature of their professional work. That which is orthodox to-day is to-morrow abandoned in favour of a better and sounder belief, so that a dogmatic doctor is apt to find himself suddenly pilloried as the teacher of false gospel. Another reason for the timidity of utterance that characterises the great majority of our profession is doubtless the iron grasp of the corporations and various other medical organisations, which treat strong individuality and plainness of speech as an unforgivable sin. Whatever the reasons may be, the fact remains that the plain speaking ring of public criticism is for the most part conspicuous by its absence as regards the internal life and politics of the medical world. It is all the more refreshing to hear someone who has the courage of his opinions, especially when that individual has attained professional eminence. Writing to the *Times* last week, Sir Ronald Ross condenses a scathing criticism on the composition of the Medical Research Committee within the space of eight lines. He writes: "There are some half-dozen living Englishmen who have done great work on the investigation of disease. It is characteristic of English administration that the name of not one of these appears on the committees just appointed to administer the first adequate national fund ever laid down in this country for medical research." Many of our readers will agree with Sir Ronald Ross. It may be remarked generally that the list of names upon which he vents his sarcasm is more notable for its sins of omission than of commission.

Sir Victor Horsley and the R.C.S. A LETTER from Sir Victor Horsley in our correspondence columns gives us a further reminder that the art of speaking out still exists in the medical profession. Perhaps, after all, it may be a developing instead of a disappearing mental characteristic. At any rate, Sir Victor trounces Mr. McKenna on the one hand and the constitution of the Royal College of Surgeons on the other with a vigour and whole-heartedness that would satisfy a high Hibernian standard. As pointed out in these columns in our last issue, we agree with him that the secret appeal of the Home Secretary to the President of the Royal College of Surgeons was unprecedented and unwarrantable. The only conceivable object must have been to ask the College to punish certain members of the College for an alleged attack (which is categorically denied by Sir Victor Horsley) upon certain Government officials. Such a step on the part of a British Minister suggests that he is not sure of his case or he would have resorted to ordinary legal methods, instead of appealing for vicarious punishment by the un-English method of secret information. It would be difficult to picture a more humiliating position than that of Mr. McKenna when the President of the R.C.S. informed him he had no jurisdiction in the matter. As to the College, Sir Victor Horsley calls it roundly an "archaic" institution. Here, again, there is probably much truth in his assertion. Our medical corporations have not progressed with the times, and are in want of reform to bring them into line with modern views. To think of a Home Secretary appealing to the Royal College of Surgeons to punish certain of its members for a political offence! The situation is worthy of Rabelais. Possibly Mr. McKenna has done the medical profession an unintentional service by calling public attention to the hopelessly decrepit constitution of that ancient medical corporation.

Malingering under the State Insurance. FROM the first it was recognised that one of the difficulties, from a medical point of view, in the way of a smooth working of the National Health Insurance Act would consist in the early detection of cases of spurious illness. It seems that some of the approved societies are already taking fright at what appears to be, in many quarters, an undue number of claims upon their resources, and, indeed, the gravity of the situation was hinted at the other day by Mr. Leishman, the chairman of the Scottish Insurance Commissioners, at the Scottish National Conference of Affiliated Friendly Societies held in Edinburgh. Human nature being what it is, there need not be much occasion for surprise that malingering is said to be "practised in a wholesale fashion." The temptation of having no work to do with ten shillings a week is not easy to resist for a low-grade workman, while the 7s. 6d. of sickness benefit granted to women affords a welcome addition to the family earnings. Though it is probable that true malingering is on the increase, it is probable that many patients under the Act place themselves unconsciously within that category for the simple reason that they are under the impression that they have a certain right to participate in the large sum of money which they believe is available for their express need, real or imaginary. It is said that women are greater offenders in this respect than men, and it is significant that public warnings have been given by prominent officials of approved societies, both in

London and in Edinburgh, with regard to the character of the claims made by women for sickness benefit.

Should Medical Referees be Appointed?

Other countries where State insurance is in vogue have had a similar experience, for it is common knowledge that valetudinarianism, if not conscious malingering, has caused a rapid growth in that country in the expenditure upon medical and sickness benefit. From the financial aspect, therefore, the question becomes a serious one for those responsible for the administration of the Act. Something must be done, and done quickly, to prevent undesirable leakage in the national fund designed for the relief of those in real necessity. The appointment of special medical referees or advisers whose duties would include the special examination of such applicants as might be referred to them by an Insurance Committee would go far to weed out the real from the sham cases of illness. It is understood that the question of such appointments is already under consideration by the London Insurance Committee, though it remains to be seen whether the general terms of the appointments are likely to be acceptable to their holders or to the medical profession as a whole. If medical referees are to be appointed at all it would be desirable that they should be of the same professional standing as, for instance, chief medical examiners to life insurance companies, or medical referees under the Workmen's Compensation Act. Their duties of examining patients and checking certificates would, no doubt, frequently involve them in delicate relationships with their fellow-practitioners, with the approved societies, and with the patients themselves. Needless to say, any medical referee should be answerable to the Insurance Commissioners only of his own district and not to any society.

The Extermination of Sleeping Sickness.

A communication of great importance was made last week to the African Society by Dr. Warrington Yorke, of the Liverpool School of Tropical Medicine. His paper dealt with the relation of sleeping sickness to big game, and it was followed by a debate of a highly interesting and valuable nature. Dr. Yorke stated that although sleeping sickness had been known on the West Coast for nearly 200 years it was unknown in Nyassaland and the greater part of Rhodesia until 1908; but now a large number of cases existed amongst Europeans and natives in those districts. In 1910 it was discovered that the parasite was of a new species and it was named the *Trypanosoma rhodesiense.* With a view of ascertaining what was the chief vertebrate reservoir of the virus, 250 wild animals were examined, including elephant, lion, rhinoceros, hippopotamus, antelope, squirrel, monkeys, rats, mice, and many others. As a result of this investigation it was found that at least 50 per cent. of game and of domestic animals at Nawaha, in the Luangwa Valley, were infected with the trypanosome. Now, as the essential factors of the spread of sleeping sickness are the trypanosome, the *Glossina morsitans* or tze-tze fly and the human being, the extermination of the malady from a given district is narrowed down to a three-cornered problem. It is obviously difficult or impossible to attempt to clear great areas of country of the brush that harbours the fly. The remaining alternatives are to shift the population or to destroy the wild animals, notably the big game, which play host to the parasites.

A Scientific Experiment Wanted.

To depopulate a region would be to convert it practically into a huge game preserve, and it is reasonable to suppose that the tze-tse flies and the trypanosomes would thrive and multiply under such circumstances. It is suggested that a decisive scientific experiment should be made to ascertain the effects of completely eradicating the game within a given area. As some years must elapse before the results of such an experiment could be ascertained, Dr. Yorke suggested that in the meantime the restrictions on killing game by Europeans and natives should be removed in those portions of the fly areas in the vicinity of human habitations. Dr. Yorke stated that as the result of careful examination of small vermin—rats, mice, wild rabbits and so on—by himself and Dr. Kinghorn, he failed to find a single instance of infection. The infection therefore appears to be more or less limited to the big game. The pith of his recommendation was not to kill off the big game completely, but to consider the advisability of driving back the game from inhabited regions. In the discussion which followed Dr. Yorke's paper, Sir Ronald Ross made the pregnant suggestion that experiments were wanted with regard to the destruction of the germ in man.

LEADING ARTICLES.

MARRIAGE, BIRTH, AND DEATH RATES IN 1912.

Of late years the Annual Summary of the Registrar-General has had a special interest in view of the steady decrease in the birth-rate which has characterised the present generation. The problem strikes deep into the roots of our national prosperity, nay, of our very existence. It is not confined to the United Kingdom, for statistics show that our own experience is merely part of a world-wide movement. The diminution of the birth-rate cannot be grasped in its full significance without weighing its relation to the marriage-rate and the death-rate. The facts recorded by the Registrar-General for the year 1912 are, briefly, a birth-rate of 23.8 per 1,000, showing a fall of .8 compared with the figures for 1911, and 3 less than the average for the decade. Were this progressive diminution in the number of children born into our population taken alone, it would indicate a situation little short of national jeopardy. Fortunately, however, there are other facts which somewhat mitigate the anxieties of the position. The low birth-rate is accompanied by a constantly decreasing death-rate which has now touched its lowest record in 13.3 for the year 1912, or 1.3 less than in 1911, or 1.9 below the ten years' average. So that although fewer children are added to the population their average expectation of life is increased. Then, again, the decrease in the death-rate mainly applies to infantile mortality, which means that although fewer children are born, a large proportion of them survive into adult life. This decrease of infantile mortality is one of the encouraging modern features of preventive medicine, but although a great deal has been achieved in that direction during the past ten or fifteen years, the returns still show an excessive preventable mortality amongst children. The question of quantity must be considered along with that of quality. It is obviously better for the community that a small number of healthy children should be produced than many weaklings. The science that may one day govern and control this phase of the problem, namely, eugenics, is still in its infancy, but signs are not wanting that one day society will recognise that it is entitled to ask that individuals who contemplate the mutual procreation of offspring should first prove their presumable fitness for a function that possesses a vital importance to the common weal. From a medical point of view any course of action that deliberately incurs the risk of the production of unfit children is logically indefensible. Before the recent Royal Commission upon Divorce and the Marriage Law, a medical witness advocated the desirability of a voluntary medical certificate of fitness in the case of each party to a proposed marriage contract. That suggestion, if a recent newspaper report be accredited, is at the present moment being enforced in New York. A further suggestion from the same source was that a special section be added to the existing labour bureaux for the purpose of giving skilled advice to all persons contemplating marriage. That suggestion has been actively applied in a South London district. Another aspect of the diminishing birth-rate that must be faced is the growing disinclination of parents to produce large families. Limitation of this kind is, after all, in its ultimate analysis, simply the expression of some underlying social force from which it is a difficult or impossible task to disentangle economic, moral, religious and personal factors one from the other. The fact remains that the birth-rate goes on diminishing year after year, while the marriage age is becoming later, and on the whole the balance of the actual population is increasing, but at a less rapid rate than that rendered possible by half a century of national prosperity and of comparative freedom from wars on a large scale. It seems inevitable that man with his increasing domination of the resources of that world in which his intellect has been evolved must sooner or later assert a reasoned control over the most vital of racial problems, namely, the production of a population physically fitted for the stress of modern civilisation. From that standpoint the limitation of production demands to be considered impartially as if it were a problem in mathematics. Science or no science, the matter has been settled independently by a large section of the community, and presents itself in concrete form for scientific investigation.

Dr. R. M. Beaton has been appointed an additional medical member of the London Insurance Committee by the London County Council.

CURRENT TOPICS.

Ghosts.

When we hear of anybody having seen a ghost our first impulse is to explain the matter away. There are more explanations of supernatural visitors than records of their visitations. Theories ranging from the distorted vision of a coat hung on a chair to elaborate conceptions of a race of beings who inhabit a world of four dimensions and occasionally slip down to one of ours, are thrust at us when we try to indulge in a mild orgy of child-like faith in our senses. We are not allowed to believe in ghosts. A Boston house was haunted in the best sense of the word. Horrid shapes and shrieks and sights unholy were its nocturnal lot. The inhabitants enjoyed a pleasantly terrified notoriety and the reporters of the yellow press exulted in featuring their investigations of the phenomena. To them enters a sanitary inspector. Looking round in his solemn official way he found a defective flue which flooded the house with a malodorous mixture of sulphurous oxide, carbon monoxide, and other ingredients. The haunted inhabitants were suffering from a chronic intoxication that affected their bodily health and their imagination. *Hinc illæ vapores.* The methæmoglobinic householders have our sincere sympathy. To be poisoned is bad enough, but it is really too bad to have one's most cherished spiritualistic visitors reduced to a thin airy shoal of visionary ghosts whose origin is a leaky stovepipe.

The Rob.

The *Medical Record* prints an article on a composition that played a prominent part in the history of secret remedies. The product is an alleged non-mercurial anti-syphilitic specific called "the rob," and has been sold without a break from 1761 to 1910, and is probably still on the market. To the syphilitic at the time of its introduction salivation and salvation were synonymous, and the symptoms of mercurial poisoning were frequently found and confused with the effects of lues. The rob was sanctioned by the Royal Medical Society of Paris, was approved by Louis XVI., and Napoleon offered the inventor 1,000,000 francs for the secret of its composition. The firm that first introduced the remedy split, and rival products were placed on the market. One of these houses published a formula which contains some thirty vegetable ingredients. Analysts from 1770 till to-day have failed to find mercury in the preparation, but many physicians have asserted that they have noticed salivation in patients who were taking no other drug. How much virtue there was in the stuff it is hard to say. Of course, the secrecy is often the most potent factor for efficacy in a proprietary medicine. It may be mentioned here that the name "rob" is Arabic in origin, meaning "a confection of joint juices," and is not an example of unprecedented commercial candour.

X-Rays in the Diagnosis of Gastric Ulcer.

The introduction of radioscopic methods and the bismuth meal has revolutionised, to a great extent, our knowledge of gastro-intestinal affections during the past few years. The subject of the use of the X-rays in the elucidation of some of the problems of gastric ulcer was dealt with at a recent meeting of the Electro-Therapeutical Section of the Royal Society of Medicine by Dr. Alfred C. Jordan and Dr. A. E. Barclay. The former reviewed the radiographic signs of chronic gastric ulcers, and called attention to the appearances seen in a typical case of ulcer at the pylorus. These are pyloric stenosis, or pyloric spasm in earlier cases, leading to gastric dilatation, and, in addition, the phenomenon of reversed peristalsis. In the case of duodenal ulcers, it has been amply demonstrated that the cause which lies at the root of the trouble is intestinal stasis, and there can be little doubt that this evil is also largely responsible for gastric ulcer. Duodenal distension occurs, and this increases the work of the stomach in forcing its contents through the pylorus. The mechanics of the subsequent stages in the process by which an ulcer is formed in the stomach have been fully explained by Sir Arbuthnot Lane. Chronic ulcers of the lesser curvature present a striking picture, the most prominent feature of which is the firm spasmodic contraction of the circular fibres of the stomach over the area of the ulcer, giving rise to a tight, hour-glass constriction, which is permanent, except under an anæsthetic. The theory of gastric spasm, set up in the first place by swallowed septic matter, aided by the action of the gastric juice and the mechanical irritation of food, has impressed Dr. Barclay, whose radiographic experiences lead him to regard a definite organic lesion as an easy transition from an apparently simple spasmodic condition. At any rate, we possess in the X-rays a valuable additional means of diagnosis in cases of ulceration of the stomach and duodenum.

Medical Men's Hobbies.

A perusal of certain publications containing the names, not always representative, of medical practitioners furnishes many interesting personal touches regarding the individual thus listed. For instance, we are informed that Dr. A. finds his pleasure in "rambling in search of microscopical life," while Dr. B. is not satisfied unless he can "hunt for big game"—in his holidays, presumably. Tastes differ, of course, and while one man may revel in collecting antiquities, another may find his highest joy in being propelled across the country at fifty miles an hour in a motor-car. Sometimes, indeed, the "lesser thing in life may take the lead," and the medical man's rightful calling fades into the background as his hobby gradually usurps its place. There are numerous instances where this transposition of occupation has occurred, resulting in the evolution of a poet, a scientist, an author, or, perchance, a musician. An interesting account is given by Dr. Henry M. Church (*a*) of Linnæus as a physician, and it may be urged that had this distinguished "Pole Star of Botany" neglected his study of plants, which at one time was purely secondary to his medical practice, the world would have been deprived of one of the greatest naturalists it has ever seen. But Linnæus himself, we are informed, so soon as his position as a botanist was established, began to cultivate a lesser study, or rather a recreation—that of collecting portraits. Apart from the possibility of distinguishing one's self in more than one calling, the value of a real hobby is its sweetly distracting power over the mind when jaded with the toils of everyday work. Every man to his trade is a good rule of life; but everyone to his hobby, as the French say, is equally true.

Medical Certification in Ireland.

It is time that the Irish Insurance Commissioners would give up their pretence of making arrangements for certification in Ireland by the employment of salaried "certifiers." The panel system was first attempted, but was refused by the medical profession in the greater part of the country. In Dublin some half-dozen medical men put their names on the panel in opposition to the wishes of their colleagues. The boast that certification was thereby provided for has already been abandoned, and the panel is no more. The same half-dozen, however, with the addition of as many more, now constitute the "Board of Medical Advisers." The humbug imposes on no one. The Dublin Insurance Committee has repudiated the "Board," and the societies are not likely to appraise it at any higher value. The attempt on the part of the Commissioners to oust medical practitioners from recommending their patients for sanatorium benefit, and to introduce the "medical advisers" for this purpose, is likely to endanger the working of the only part of the Act which up to the present has been a success. So far the administration of the sanatorium benefit has had the cordial co-operation of all medical practitioners. There are signs, however, that the patience of the profession is wearing thin. If the Commissioners, by their attempt to shove their "advisers" between the medical man and his own patient, bring about an open revolt, they have only themselves to blame for hanging up the benefit.

The Systematic Study of Chronic Diseases.

From the first days of his work in the wards of a hospital the medical student is impressed with the superior claims of acute over chronic affections. The acute case, from the fact that it is acute, is given preference of admission into most hospitals, while the poor "chronic" often has to make shift with less comfortable quarters to make room for the newcomer. It is often the case that clinical teachers, especially members of a junior hospital staff, find more "points" for examination purposes when going over an acute case with a class than when confronted with a chronic nerve or heart case. Hence it is that, little by little, a sort of distaste for the study of all cases of chronic disease is acquired. It is perfectly true, of course, that there is frequently nothing fresh to observe about such cases, so that ward-clerks, to whom medical report-writing may be a burden, have cause for rejoicing when taking over a series of chronic cases from their predecessors in office. A correspondent in the *Morning Post* has recently pointed out what he considers is a medical anomaly—namely, that under the present system cases of long incapacitating illness can rarely be followed up to their termination by members of hospital staffs. The Poor Law Infirmaries, excellent institutions as they are, might well, this writer believes, be served by skilled investigators and specialists in a similar manner to the voluntary hospitals. In this way it is urged that the infirmaries would become important centres of clinical teaching and also of pathological research, while the effect upon medical education in general would be far-reaching. The suggestion is not a new one, and there are a number of technical difficulties in the direction of administration, which would have to be overcome before any workable arrangement of the kind could be inaugurated. Nevertheless, such a movement could not fail to benefit both the medical profession and the public.

Human Asymmetry.

The statement made by a medical witness in a recent law case to the effect that no person possesses legs of equal length has excited the usual paragraphs of surprise in the lay Press. It is well known to medical men that perfect symmetry of form exists only in the painter's or sculptor's imagination. Even the so-called "perfect woman," who exhibited herself some time ago at one of the London places of entertainment, would, no doubt,

---

(*a*) *Edinburgh Medical Journal*, June, 1913.

present some fractional difference in the length, or other dimension, of the limbs when scientifically measured. In many cases this asymmetry is quite marked, especially of the features, one ear being set higher in the head than the other, or one side of the face may be smaller than the other, apart from such defects as that of a deflected septum nasi. The influence of habit is, to a large extent, responsible for this inequality. As long as man is, for the most part, ambidextrous, he will continue to perform certain movements with his right hand alone, or more than the left, which are not without influence even upon the features. Every good portrait-photographer is familiar with these facial variations, and the skilful artist is he who successfully prevents such trivial defects from being noticed in the finished picture. If a certain amount of asymmetry is normal to the majority of healthy people, it is far more commonly seen in disease. The atrophy of a paralysed limb, the shortening of a leg from joint disease, the retraction of one side of the chest in certain chronic lung affections, are only a few examples of morbid asymmetry that will occur at once to the medical mind. An interesting sidelight from the point of view of heredity is the occurrence of such variations as differences in the colour of the eyes in the same individual.

The Problem of the Consumptive Lodger.

Since public opinion has been more or less aroused as to the infectious nature of pulmonary tuberculosis, many new problems have presented themselves for solution, both legally and socially. One of the most important of these concerns the lodger who is affected with consumption, and who may find himself in a very awkward position by reason of his infirmity. Now that tuberculosis has become a notifiable disease, people are beginning to fight shy of having consumptives, particularly strange lodgers, in their houses. It matters not whether the disease be, strictly speaking, in the infectious stage or only incipient and devoid of expectoration, it has got wind that the case has been notified, and the unfortunate patient may be requested to seek other lodgings as hastily as though he were afflicted with leprosy or diphtheria. An interesting legal decision was given the other day at the Monaghan Quarter Sessions by His Honour Judge Johnston, when a Rostrevor boarding-house keeper sought to recover damages from the executor of a deceased lodger for damages committed by him when residing in her house for a specified period. It was alleged that he "infected the house and furniture with a contagious disease." He was admitted as a lodger as suffering from congestion of the lungs, whereas he was affected with advanced consumption, and on the second morning he had a sharp attack of hæmoptysis. The plaintiff's case was that three of her other lodgers left, and she was unable to let for the rest of the season, and that a breach of warranty in not informing her of the nature of the deceased man's true illness had been committed. At the time of the letting the plaintiff required a statement as to whether the deceased was suffering from consumption, and she was assured that he was not. It was held that this assurance was what the law knows as a warranty. Under the circumstances, the learned judge awarded the plaintiff the full amount of her loss.

As we go to press we regret to learn the death of Mr. Alfred Willett, F.R.C.S., Consulting Surgeon to St Bartholomew's Hospital. We hope to publish a full obituary in our next issue.

PERSONAL.

H.R.H. Princess Louise, Duchess of Argyll, laid the foundation stone of the South London Hospital for Women (Incorporated), South Side, Clapham Common, yesterday afternoon.

Dr. H. W. Barnes has been appointed Assistant Medical Officer of Health for the City of Lincoln.

Mr. J. A. Craig, F.R.C.S., has been appointed Lecturer in Ophthalmology in the Queen's University of Belfast.

Dr. Jehan M. Barlet, M.D.Brux., L.R.C.P.Lond., M.R.C.S., has been appointed Anæsthetist to the French Hospital, London.

Sir Robert H. Woods, of Dublin, was the recipient of the honorary degree of M.Ch., of the University of Dublin on the 26th ult.

Dr. E. M. Brockbank, Honorary Physician to the Manchester Royal Infirmary, has been appointed Dean of its School for Clinical Instruction.

The Postmaster-General has appointed Dr. J. Sinclair to be Chief Medical Officer to the Post Office in place of Dr. A. H. Wilson, who is retiring under the age limit.

Professor A. C. Geddes, of the Royal College of Surgeons in Ireland, has been appointed to the Chair of Anatomy in McGill University, Montreal. Professor Geddes will take up the duties of his new post in the autumn.

Among the names of the scholars who have been awarded Science Research Scholarships by the Royal Commissioners for the Exhibition of 1851 is that of Dr. John Charles Johnson, M.A., M.B., M.Sc., of University College, Cork.

Mr. W. H. Clayton-Greene, F.R.C.S., Surgeon to the French Hospital, London, was personally decorated with the Cross of the Legion of Honour by the French President last week upon the occasion of the visit of the latter to the institution.

Dr. Alice Hutchison, of Edinburgh, was entertained last week at a complimentary dinner on her return from the Balkan seat of war. Our scotch correspondent gives some interesting particulars of this lady's experience in the convoy corps in another column.

The annual general meeting of the Poor Law Officers' Association of England and Wales will take place to-morrow, July 3rd, at 3 p.m., in the rooms of the Medical Society of London, Chandos Street, W., when Dr. C. Thackray Parsons, Medical Superintendent of the Fulham Infirmary, will read a paper on "The Present and Future of the Poor Law Infirmary."

Dr. Leonard. D. Gamble, of Ambergavenny, who is leaving shortly for the Orange River Colony for the benefit of his health, was presented the other day on behalf of the inhabitants of the district with an illuminated address and a purse of £200, as a token of the esteem and affection with which he had always been regarded when in practice among them.

The French Government, through the Minister of War, has just conferred on Mr. Adolphe Smith, F.C.S., the Commemorative Medal of the campaign of 1870-71, instituted by the law of November 9th, 1911. Mr. Adolphe Smith, who has been on the staff of the *Lancet* for many years, served during the siege of Paris under the distinguished surgeon, Dr. Léon Labbé, and took part in several of the battles which were fought under the walls of Paris. During the retreat from Buzanval he came across the late Sir William MacCormac, and was able to render him assistance when under fire in the village of Ruel.

CLINICAL LECTURE

ON

ABSENCE OF ABDOMINAL RESPIRATORY MOVEMENT AS AN INDICATION OF PERICARDITIS. (*a*)

By W. ESSEX WYNTER, M.D., F.R.C.P.Lond.,

Physician to the Middlesex Hospital.

IN January, 1911, I read in the Medical Section of the Royal Society of Medicine a short paper on Absence of Abdominal Respiratory Movement as an indication of Pericarditis, pointing out that though "in the majority of thoracic cases affecting the lung and pleura this is one-sided, and the influence on abdominal movement proportionately less marked," in acute pericarditis the cessation of phrenic action is bilateral, and consequently absence of abdominal movement is as obvious as in abdominal disorders, though rigidity and general tenderness are for the most part lacking.

The two cases first cited illustrated this point in a very striking manner, in that the remarkable stillness of the abdomen led to the diagnosis of acute abdominal lesions, the pericarditis being discovered later. The first, seen in October 1905, was a young Irishman, in the service of a medical friend, who had been seized with acute epigastric pain while waiting at table. Conspicuous absence of abdominal movement led to the supposition that he had a perforated gastric ulcer, and I was asked to take him into hospital for operation. The observation and inference had been made by an independent local practitioner, and was quite disinterested as regards pericarditis, which was not thought of at the time.

Next morning the pain had subsided, he had slept fairly, and was obviously better, clamouring for food, and impatient of restraint. There was no evidence of free gas in the peritoneum or of local irritation. A routine examination revealed nothing. Next day he got up and went out of his own accord, but experienced a recurrence of his pain. When re-examined on the fourth day pericardial friction was quite obvious. There was then dyspnœa and præcordial pain, the abdomen remaining immobile. Pericardial murmur was audible four days, temperature 101.4, pulse 96. On getting up a week later temperature rose to 103 and pulse 104, but no further development occurred, and he was able to leave the hospital after a stay of three weeks.

The second case, seen in November, 1909, was a man, æt. 40, admitted with complaint of pain in the abdomen extending to the thighs—headache, anorexia, vomiting and parched mouth of two days' standing; temperature 102.6, pulse 92. He lay on his back with his legs drawn up. The right rectus abdominis was tense and there was some tenderness in the right iliac region. Abdominal respiratory movement was scarcely discernible. The only thoracic sign present was a reduplicated second sound. No local indication of pericarditis then existed. Five weeks after the original attack an operation for appendicectomy was performed, but careful examination revealed no morbid condition, and there were no adhesions. The incision healed rapidly, but after five days there was a rise of temperature with recurrence of symptoms and pericardial friction was recognised. The diaphragm was not contracting at all, the abdomen actually sinking in with each inspiration. Pulse 90 to 100. The stomach was dilated, and its resonance could be traced as high as the fourth intercostal space in the axilla. Breath sounds were absent at both bases, but there was no complete dulness on percussion. Under the X-ray screen a large shadow could be seen in the heart region, suggesting pericardial effusion. The diaphragm was motionless in the position of expiration. Ten days later movement of the diaphragm was returning, though friction could still be heard over the heart. Breathing became audible at both bases, and the patient was discharged a month after the first appearance of the pericardial friction.

Both these cases illustrate the independent observation of loss of abdominal movement as a precursor of pericarditis, and likewise the temporary remission of symptoms attending rest in bed. They also suggest that inflammation of the pericardium, possibly commencing on the diaphragmatic surface, caused reflex inhibition of movement some days before the appearance of the ordinary clinical signs over the præcordia.

Ten other cases were subjoined in which loss of abdominal movement had been conspicuous, some with screen examinations demonstrating the stasis of the diaphragm, and three showing evidence of pericardial effusion. In one case the contents of the upper abdomen, such as the kidneys and opaque masses in the intestines, could be seen to participate in the upward inspiratory movement, for in this the diaphragm actually rose with inspiration instead of descending, following the aspiration of the upper chest.

Associated phenomena are dilatation of the hollow abdominal viscera, especially the stomach, and collapse with loss of function of the lower lobes of the lungs, with slight upward displacement of the heart.

Loss of abdominal movement, as a sign of pericarditis, is the more valuable in that it may precede and outlast the other indications, and so afford grounds for anticipatory or retrospective diagnosis. The condition of diaphragm paresis affords a reasonable explanation of the cyanosis and dyspnœa so usual in the complaint and of the upright position so commonly assumed by the patient: the former expressing the effect of respiration restricted to the function of the upper lobes of the lungs, and the latter pointing to an unconscious effort on the part of the patient to utilise the weight of the abdominal viscera in depressing the passive diaphragm and enlarge the thoracic area.

(*a*) Delivered at the London Polyclinic, May 13, 1913.

Restriction of abdominal movement was apparently more marked with a fibrinous exudate than with effusion, in this respect being parallel to similar affections of the pleura or peritoneum.

The detection of a limited amount of effusion in some of the cases by X-ray examination was a new discovery, though it can readily be understood that two or three ounces of serum gravitating to the back or bottom of the pericardial sac would give no evidence of its existence by the ordinary method of percussion over the præcordia.

The conclusion in regard to these cases was, that where loss of abdominal respiratory movement was well marked, in the absence of more obvious thoracic and abdominal lesions, pericarditis should be closely looked for, and when this sign was wanting, dubious indications of pericarditis might be discounted.

Since formulating this statement rather more than two years ago I have met with thirty cases in my hospital wards, containing fifty beds, in which the loss of abdominal respiratory movement has led to the detection of pericarditis—a number so much in excess of those usually noted that it at once demonstrates the value of such a sign in assisting to recognise a very obscure condition, and strongly suggests that numbers of instances of pericarditis have hitherto been overlooked. This is not altogether incredible in view of the favourable course usually followed by the commonest form, rheumatic pericarditis, without excess of effusion, and is entirely in accord with the dictum of pathologists that affections of the pericardium of all kinds are recognised far more frequently in the *post-mortem* room than in the wards, which is tantamount to saying that even the most severe cases are commonly overlooked during life.

But it is not merely to redress the discrepancy between the clinical and pathological aspects of pericarditis that this sign is of value.

There are many instances of primary illness otherwise unexplained, as well as exacerbations in the course of other complaints, and terminal phases proving fatal in chronic maladies, where the timely recognition of pericarditis, which is the dominant factor, would dispel a great deal of mystery and uncertainty, and might relieve much suffering and even prolong life.

Terminal cases are represented by the only ones, four in number, that proved fatal. None were rheumatic.

A young woman of 21 was admitted with pueperal sepsis, which proved fatal on the third day after admission.

Abdominal movement was absent.—There was evidence of effusion in the right pleura and friction could be heard over the pulmonary cartilage. Pericarditis was diagnosed. At the autopsy the pericarditis was demonstrated and O.i. fluid in right pleura, containing streptococci.

On the first of the present month of May a young woman of 18 was admitted in a state of orthopnœa. The temperature was subnormal. The urine 1015, free from albumen (30 oz.). There was much restricted abdominal movement, and friction could be heard to right and left of sternum, both pericarditis and left pleurisy being present. She died May 4th, and at a *post-mortem* examination the lesions of the pericardium and pleura were verified. They were secondary to small white kidney and uræmia, the heart weighing 14 oz.

Two other cases proved fatal in children of 5. One complicated with purpura and parotitis, but presenting well-marked friction and cantering rhythm over the præcordia. This was septic. The other displayed not only to-and-fro friction over the heart, but effusion was recognised by the aid of the X-ray screen. Unfortunately she developed acute œdema of the lungs and died very rapidly. Both cases exhibited marked restriction of movement in the abdomen.

As no *post-mortem* examinations were permitted there was no ocular demonstration of the pericarditis, though no reasonable doubt existed.

In four cases the pericarditis was associated with chorea in children. Two were admitted with this complaint, and evidence of pericarditis either in to-and-fro friction or cantering rhythm with loss of abdominal movement.

Another, admitted with rheumatism and mitral regurgitation, developed chorea, and at the same time loss of abdominal movement was noted and pericarditis recognised by well-marked friction at the base of the heart. When re-admitted for recurrence of chorea three months later the pericardium was found to be adherent. The fourth case, admitted with chorea, later developed pericarditis and effusion.

Abdominal respiration was abolished and the X-ray screen demonstrated the stasis of the diaphragm and a non-pulsating shadow surrounding the heart, representing effusion. All these were discharged convalescent.

Next to *post-mortem* evidence of pericarditis comes that of paracentesis of the paricardium, very infrequently called for, and still more infrequently performed.

H. M., a boy, æt. 13, was admitted for rheumatism and mitral regurgitation on November 1st, 1911.

There was restriction of abdominal movement and præcordial pain. Temperature 100, pulse 108. Friction was discovered at the base of the heart. On November 3rd an extensive non-pulsating shadow was seen by the X-ray screen in the cardiac area. In spite of local and general treatment by salicylates, the area of dulness over the pericardium increased, and the patient became much distressed.

On November 13th paracentesis was performed. Under a general anæsthetic, given with great caution, the aspirating needle, 4 ins. long, was introduced ½ in. outside the sternum in the fourth right inter-chondral space, being directed horizontally backwards and inwards so as to graze the back of the sternum. By this path, as you may see by looking at this specimen from the front of the chest, the needle passes internal to the mammary vessels, and entering the pericardium about the middle line, avoids either pleura. The needle was inserted about 2 in., and without any difficulty some 2½ oz. of blood-stained fluid were withdrawn. Immediate relief followed, and the boy was subsequently discharged convalescent.

This and the remaining cases were all rheumatic. These run usually a favourable course, and in most instances being included in the general treatment by salicylates would not greatly suffer if the pericarditis were overlooked, as commonly happens. In a fair number of cases, however, the pericarditis develops late in the attack, not infrequently while the patient is regarded as convalescent, and sometimes is the cause of delayed convalescence or apparent relapse.

For instance, a man, æt. 27, was admitted on December 28th, 1912, having been laid up with rheumatism six weeks. Getting alarmingly worse he was brought to the hospital, and it was at once noted that abdominal respiration was absent. There was an apex systolic and a double aortic murmur, which made the detection of pericardial friction increasingly difficult. The screen, however, confirmed the diagnosis of diaphragm stasis and excluded effusion in the pericardium. His recovery took six weeks.

One case, a young woman, æt. 23, was reclaimed from a surgical ward where she was admitted on account of loss of movement and rigidity in the upper abdomen, suggesting peritonitis. No physical signs were detected in the chest, but next day there was a well-marked pericardial rub in the second left interspace. This was at first to and fro, but persisted as a crackling systolic bruit. I had the confirmation of Sir James Kingston Fowler that this was produced over the auricular appendix.

In six cases pericarditis developed some days or weeks after the patient had been admitted with rheumatism. The routine examination on admission satisfactorily excluding this condition, which, moreover, supervened with rise of temperature, sometimes to 104, and increased rapidity of pulse.

In two cases pericarditis was diagnosed, and local remedies applied on the strength of these signs, with loss of abdominal movement, and in both friction developed in 24 to 48 hours.

One case of double basic pneumonia with left-sided empyema developed pericarditis, indicated by loss of abdominal movement and præcordial friction, which subsided on draining the pleura, showing that, as in the pleura, an effusion of pneumococcic origin need not necessarily be purulent.

Perhaps the most signal instance of the value of this sign occurred in a young domestic servant who has only just left the hospital.

She had been laid up for three weeks with fever, dyspnœa and dulness at both bases posteriorly, and was considered to have had double basic pneumonia. On the fifteenth day, as the temperature had not fallen, and she was still very ill, it was thought she must either have an obscure, possibly interlobar, empyema or acute pneumonic phthisis. There was, however, loss of abdominal movement, and in spite of the long and severe illness, she was able to sit up to be examined. Moreover, there had been frequent sweating, the temperature had only once reached 103, and she was not as prostrate as would be expected after double pneumonia. An immediate screen examination disclosed stasis of the diaphragm, a pericardial rub having previously been detected. Local remedies were applied, and she made a rapid recovery. I have little doubt that this was an instance of pericarditis, probably rheumatic, associated with stasis of the diaphragm and collapse, not pneumonia of the lower lobes.

This altered aspect of the case, based on the abdominal symptoms, made all the difference in the prognosis as well as the treatment of the case, with the happiest result.

I have picked out these cases to illustrate special points. The bulk of those included in the survey of 30 in two years were ordinary rheumatic cases in children and young adults in whom pericarditis occurred as a complication, and was first suspected on account of loss of abdominal movement or where this sign was noted after finding the pericarditis. But I think they help to prove how constant this sign is and how very much commoner pericarditis is than was formerly believed.

In conclusion a few words may be added about the treatment of the common form of rheumatic pericarditis. Of course salicylates are the potent remedies, but I have long been convinced by the frequency with which pericarditis develops in patients already taking salicylates in the course of rheumatism that the internal administration is not sufficient. In all cases I apply an ointment of ʒii. salicylate of methyl in ℥i. lanoline to the præcordia, renewing it daily for four or five days till the temperature and other signs subside. It may be even necessary to omit the internal administration of salicylates if symptoms of over-dosage have appeared, but sufficient is absorbed through the skin to keep up the general effect besides concentrating its maximum influence locally. This remedy is effective in effusion as well as in cases exhibiting only friction, though the screen examinations show that in these, fluid, in small quantities, is often present when quite unsuspected.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Prof. Dr. O. Kukula, in Prag. Subject: "The Surgical Treatment of Epilepsy."*

ORIGINAL PAPERS.

INTESTINAL ANGULATIONS AND KINKS ASSOCIATED WITH STASIS. (a)

By W. I. de C. Wheeler, F.R.C.S.I.;
Surgeon to Mercer's Hospital, Dublin.

The profusion of recent literature on the subject of intestinal stasis produced by non-inflammatory intestinal adhesions and kinks, with all the varying and contradictory expert opinions put forward, renders it difficult to compile a communication in any sense complete.

In this paper, for the sake of brevity, it will be necessary to confine my remarks to personal experiences with twenty recent abdominal cases which illustrated conditions associated with the term intestinal stasis. Some or all of the pathological conditions which I mention later in the paper were present in my series of cases.

It is not so long since we were taught that intestinal kinks and adhesions other than inflammatory were a product of the imagination—" A dagger of the mind, a false creation." Those who were first to discount the possibility of the presence of kinks and adhesions have now taken refuge in the statement that every individual has adhesions and kinks, and they do no harm. These two contentions are obviously impossible to adjust or harmonise.

It may be now taken as an axiom that in a large percentage of abdominal cases, cases of gastric or duodenal ulcer, appendicitis, gall-stones, and allied conditions, including cystic ovary, there is present a varying degree of intestinal stasis associated with the presence of certain pathological angulations and kinks to be mentioned later.

(a) A paper read before the Section of Surgery, Royal Academy of Medicine in Ireland, May 9, 1913.

In a certain proportion of the cases these conditions, *per se*, give rise to no symptoms whatever, in others the symptoms are slight or masked; in the remainder they are so marked that a novice could not be deceived as to their cause.

The connection between, say, duodenal ulcer and intestinal kinks and other pelvic lesions is in dispute; that there is a close connection is beyond doubt, and it has led Moynihan to remove the appendix in most cases of duodenal ulcer, and Lane to abandon the operation of gastro-enterostomy except for the relief of pyloric obstruction. From the admitted association of various intra-abdominal lesions there is one practical lesson to be learnt—the fallacy of performing very rapid operations for the removal of a non-suppurating appendix. If the appendix is in an anatomical position, free from pathological adhesions, and lends itself to rapid removal, either the operation is not justified or, more likely, the symptoms which called for the operation were due equally to other associated abnormal conditions. Surgery has been discredited by the persistence of symptoms after removal of an appendix by surgeons ignorant of the existence, say, of a Jackson's membrane or other abnormality. The presence of a surprisingly normal appendix in a patient who suffered from symptoms sufficiently severe to warrant operation should call for pause, and a careful search be made for abnormalities at the terminal part of the ileum, the ascending colon, and hepatic flexure, and if need be in all "four corners" of the abdominal cavity. The removal of an appendix in four or five minutes is easy of accomplishment, but does not savour of scientific surgery, and the diagnosis of "Appendix Dyspepsia" in the light of recent advances in abdominal surgery can seldom be justified.

The following lesions were well marked in my series of cases, some in one, others in another; the presence of one abnormality did not necessarily mean the presence of another, although in several cases all the lesions to be mentioned were well marked and distinct in the same case. Thus, in some, appendicitis would be accompanied by a well-marked Jackson's membrane, a Lane's kink near the ileocæcal junction, and a mega-duodenum. In almost every case the terminal mesocolic kink (pelvic colon) was present, in some causing undoubted abdominal symptoms, in others doing no harm whatever.

Lane's terminal ileal kink was described as caused by a band first forming part of the under surface of the mesentery and afterwards a distinct ligament which attached itself progressively to the ileum more and more distant from the mesenteric border. The band is shorter than the mesentery, thus causing a pucker or kink of the ileum, which is, in addition, often rotated on its long axis owing to the attachment of the band to the anti-mesenteric border.

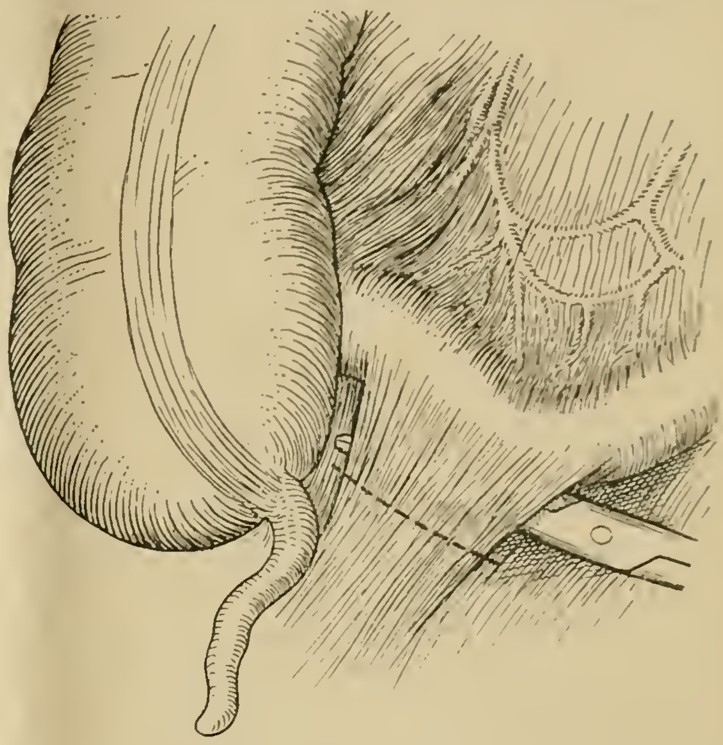


Fig. 1.—Diagram of Lane's Terminal Ileal Kink.

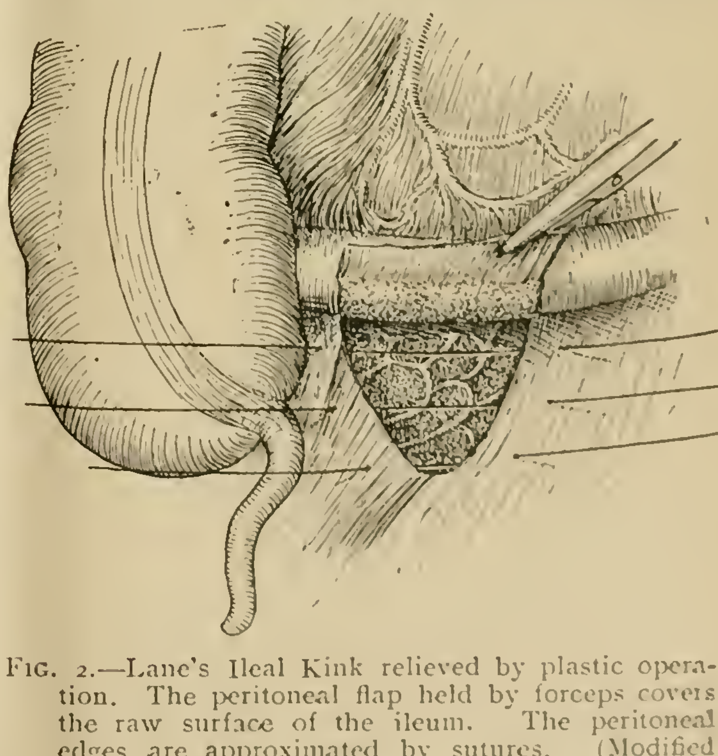


Fig. 2.—Lane's Ileal Kink relieved by plastic operation. The peritoneal flap held by forceps covers the raw surface of the ileum. The peritoneal edges are approximated by sutures. (Modified from Gray and Anderson.)

According to Lane, this and other intestinal kinks are due to "the crystallisation of lines of force" to prevent prolapse of the viscera in cases of chronic constipation. Gray and Anderson do not accept the explanation, and point out that in both the lower ileal and lower sigmoid kinks the mesentery and mesosigmoid show no evidence of "the crystallisation of lines of strain" in the upper layers where most strain would be expected, and that in a number of cases of ileal kink there was no tendency whatever to a dropped cæcum, which, on the contrary, was well fixed. In my cases of ileal kink, which were comparatively few, I could not satisfy myself that the small intestine was much, if at all, dilated above the lesion as described by Lane, but in two there was distinct evidence of mega-duodenum. This latter condition is produced not in any direct manner from the ileal kink, but by a similar adventitious formation at the duodeno-jejunal flexure, or to a band running across the duodenum just to the right of the superior mesenteric artery, as described by Murphy. Jackson's membrane has attracted considerable surgical attention during the past twelve months. It is a very obvious lesion found regularly in patients suffering from right-sided pain or discomfort with a loose, splashing cæcum, constipation, and some visceroptosis. It is present in other cases, but one soon gets familiar with a type of case where its presence can be foretold almost with certainty before operation. It is a thin, vascular veil, in which long, straight blood-vessels run a parallel course, compared by Jackson to an œdematous arachnoid. It is like a cobweb bag which is too small to hold the ascending colon without puckering it. It extends from the hepatic flexure to the cæcum, and may surround the colon on both sides of the anterior longitudinal band, merging below into the mesoappendix and pelvic peritoneum. At the hepatic flexure the membrane when lifted up on the finger often forms a formidable band binding and obstructing the colon.

The better developed the Jackson's membrane, the more prolapsed and distended is the cæcum. This is an observation of importance, for it teaches that it does not assist in fixing a mobile cæcum, but, on the contrary, by sometimes producing a very acute kink at the hepatic flexure of the colon causes dilatation and ptosis of the cæcum and ascending colon. It is noteworthy in these cases that the transverse and descending colon are collapsed in marked contrast to the cæcum and ascending colon. It is, therefore, more likely that Jackson's membrane is a cause, and not an effect, of intestinal stasis.

It is almost certain that Jackson's membrane is not inflammatory in origin. A study of the direction of the lymphatics proves it could not be a pericolic inflammation which had extended along the lymphatics of the subperitoneal coats. Furthermore, the blood-vessels run in a linear fashion, unlike those in inflammatory tissue, and no bleeding results from the general separation of the membrane, but, on the other hand, a sufficiently raw surface is sometimes left to necessitate the application of an omental graft to prevent subsequent adhesions. In young children Jackson's membrane is often well marked.

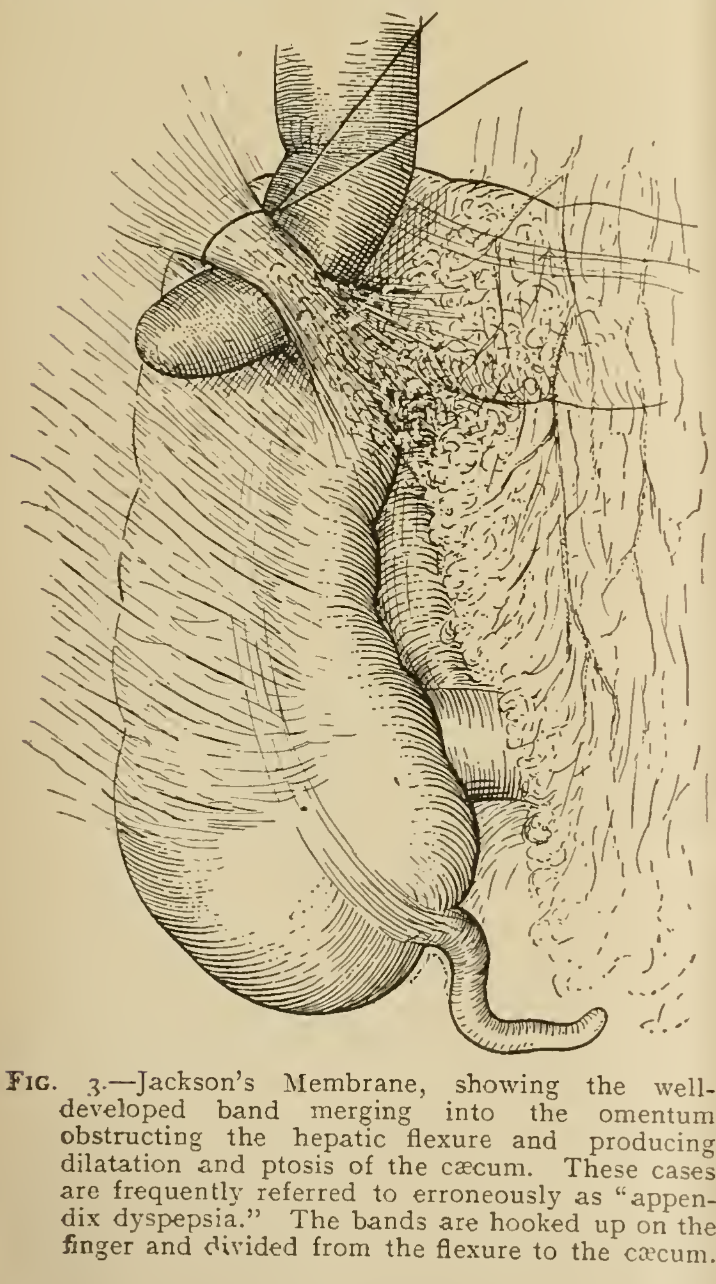


Fig. 3.—Jackson's Membrane, showing the well-developed band merging into the omentum obstructing the hepatic flexure and producing dilatation and ptosis of the cæcum. These cases are frequently referred to erroneously as "appendix dyspepsia." The bands are hooked up on the finger and divided from the flexure to the cæcum.

Mayo's theory of abnormal burrowing of the cæcum and lower end of the ileum during their descent from the liver under the parietal posterior peritoneum has been dismissed owing to the absence of such a process in the examination of a very large number of fœtuses.

Gray and Anderson's is the most fascinating explanation, and appeals to the imagination of those who have studied the structures at operations. They say the membrane is really the right margin of the great omentum. The omentum crosses the hepatic flexure and blends by physiological fusion with the posterior parietal peritoneum to the outer side of the colon. This fusion also takes place between the omentum and anterior wall of the colon near the longitudinal muscular band in the same way as the omentum finds attachment to the transverse colon in a corresponding position. During the descent of the cæcum the omentum crossing the flexure and becoming adherent to the parietal peritoneum externally gets pulled out, and is found in later life as the membrane already described. This theory is strengthened by the presence of fat, the linear arrangements of the vessels, and the site of attachment of the membrane to the colon. In several of my cases I could trace a direct and uninterrupted connection between the membrane and the omentum. This was specially noticeable above at the hepatic flexure, where Jackson's membrane often takes the form of powerful bands intermingled with fat, obstructing the onflow of the contents of the colon. (Fig. 3.)

In addition to the ileal kink, the hepatic kink produced by Jackson's membrane, the dilated duodenum already referred to, I have had one case of Payr's disease, where there was a well-marked kink of the splenic flexure, with dilatation and ptosis of the transverse and ascending colon, and collapse of the descending colon. It is, I believe, a comparatively common condition, but I have only seen it twice before, once in a case operated upon by a colleague before its significance was understood, and once with Mr. Gray, of Aberdeen. The kink is probably due to a shortened phrenocolic ligament.

In two-thirds of my cases the lower sigmoid kink was present. So frequently is this condition seen that it is looked upon as almost normal by some authorities. All are agreed, however, that in certain cases it produces very marked constipation and left-sided pain with dilatation of the colon above. In many cases, on the other hand, it interferes with the bowel little, if at all. Here we can see a beautiful example of a kink produced by the excess of physiological fusion as described by Toldt. (Fig. 4.)

Gray attributes the formation of all kinks to excess of physiological fusion, and it has been shown that the formation of Jackson's membrane can be attributed to a like cause. While Gray believes enteroptosis is produced by the presence of obstructive kinks, yet the congenital theory can be made clear by another interpretation.

When man assumes the erect position, in order to prevent a drop of all the viscera into the pelvis, nature, by physiological fusion of the visceral and parietal peritoneum, produces the splenic and hepatic flexures, the mesentery and mesocolon, and all ligaments intended to suspend the viscera.

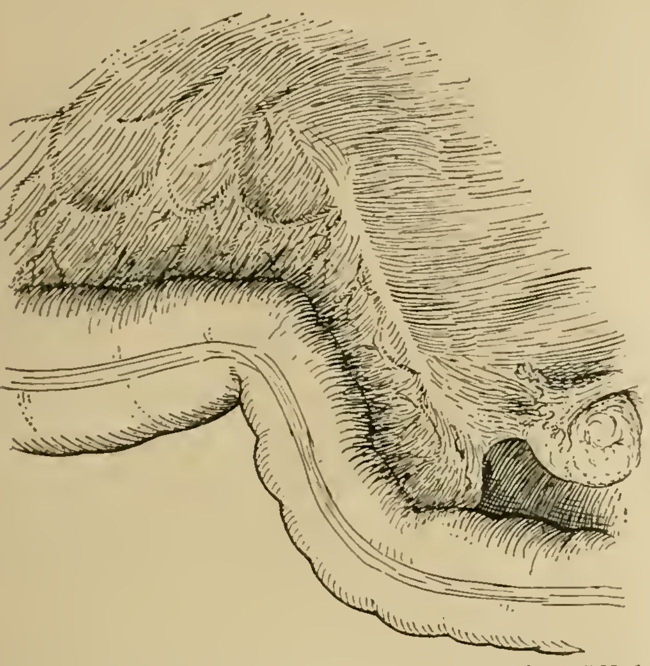


Fig. 4.—Kink of the Pelvic Colon, showing "Toldt's Line" and implication of the left ovary. Obscure left-sided pain and constipation is frequently produced by this condition and relieved by operation. (Modified from Gray and Anderson.)

Assume we approach at birth towards our ancestral condition, and suffer from slight congenital ptosis, or assume that later in life ptosis is produced from similar causes, then there may be peritoneal fusions in unusual places to ensure fixation as a provision of nature against further prolapse.

To revert to the terminal kink of the pelvic colon, which is such a common condition, if we pull on the colon we can see the line of fusion between the outer side of the mesocolon and the peritoneum of the left iliac fossa. This line is known as Toldt's white line.

In cases of chronic constipation, in the absence of other causes, the "undoing" of this kink, especially in enteroptosis cases, will have the effect of producing a regular daily motion, and a consequent great improvement in the condition of this miserable class of patient.

I have operated upon several cases for my colleagues, Drs. Lumsden and Holmes, with the result stated.

Left-sided abdominal pain with constipation may often be completely relieved by a plastic operation on this kink, and it should be remembered that the pain is often rendered more severe by implication of the left ovary and broad ligament in the line of fusion. (Fig. 5.)

The congenital theory is not upset by the contention that symptoms do not arise until adult life. We have only to think of such conditions as cervical rib and congenital hernia to see where the fallacy of such a contention lies. The nature of the operation required in each case is shown in the illustrations and requires no further description.

In two of my cases there were so many developmental adhesions and kinks that I short-circuited the ileum into the lower sigmoid—the operation recommended by Lane. (It is not possible for anatomical reasons to anastomose the ileum with the rectum as frequently stated.)

If the permanent results of the plastic work are as good as the immediate results the short-circuiting operation will become unnecessary, but in any event the operation, as often attributed to Lane, is not performed in the manner he recommends, and gives correspondingly bad results. The ileum must be completely divided and anastomosed low down below the sigmoid kink.

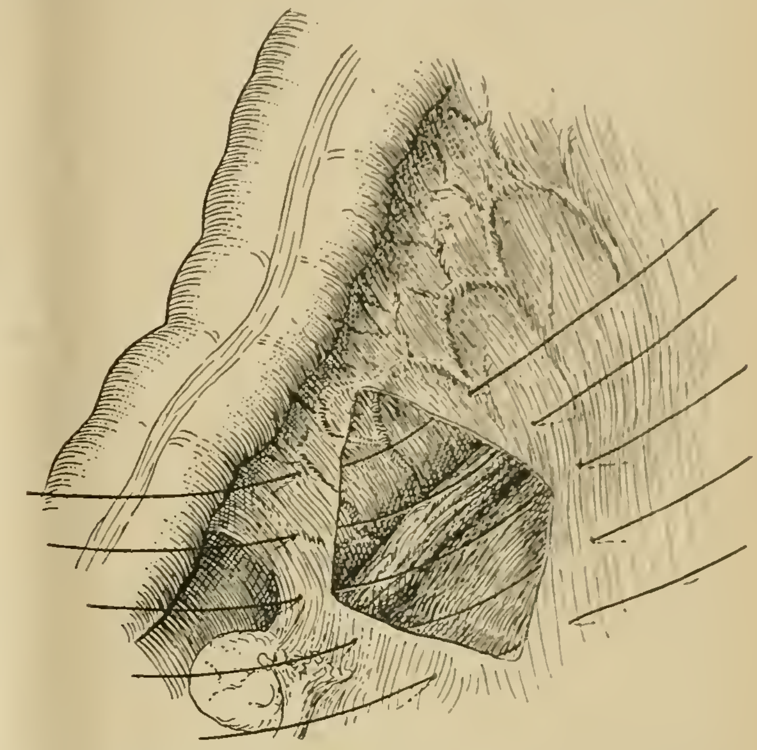


Fig. 5.—Kink of the Pelvic Colon relieved by plastic operation. (Modified from Gray and Anderson.)

If the kink is not well marked it should be artificially produced to prevent reverse peristalsis—a complication which, in early days, rendered necessary a subsequent colectomy in a fairly large proportion of cases.

In my series of cases the symptoms were very varied. Left-sided pain and discomfort by a process of elimination was diagnosed in several cases as being due to a well-developed mesosigmoid kink. These patients, usually females, were cured by operation.

Diffuse right-sided pain, tenderness, and discomfort in patients with a mobile splashing cæcum and distended ascending colon, were found usually to present a well-marked Jackson's membrane and hepatic kink; the appendix often showed little or no signs of disease. The ileal kink was present in some of these cases, but absent in at least an equal number. One case diagnosed as duodenal ulcer proved to be a megaduodenum accompanied by Jackson's membrane and ileal kink. The patient was a medical man, and presented all the signs and symptoms of duodenal ulcer. X-ray photographs supported this view, but on operation only the conditions mentioned were found. The patient was completely and immediately relieved by a plastic operation.

Two cases only were typical of auto-intoxication—there was staining and wrinkling of the skin, sweating in the axillæ and groins, enfeebled circulation with cold extremities, dulling of the mental faculties, etc. The complete short-circuit operation was performed. These patients are tolerably well. One was done two years ago, the other has just left hospital, but still complains of abdominal distress. The number of ailments directly caused by intestinal stasis are probably legion, but of the remote lesions, such as chronic rheumatoid arthritis, cystic breasts, and hypothyroidism I have no personal knowledge, and therefore I only mention them to dismiss the subject.

I am convinced, however, that many cases of rheumatoid arthritis in the early stages can be cured or relieved by the correction of intestinal lesions causing stasis, in a more certain manner than by the administration of intestinal antiseptics and other drugs.

X-ray photographs were taken of a number of the cases by Dr. Hayes to assist localisation of the lesion before operation.

I must acknowledge my great indebtedness to Mr. Gray and Sir Arbuthnot Lane for allowing me to see their operations and results in connection with this subject.

A GUIDING PRINCIPLE IN THERAPEUTICS.

By J. SNOWMAN, M.D., M.R.C.P.LOND.

IN a recent communication (*a*), Dr. William Bain refers to the treatment of gall-stone disease in the following words :—" At the risk of unduly emphasising the point, I would reiterate my belief that the primary and essential factor in the treatment of this affection is the rectification of the digestive functions. By correcting dietetic errors, and stimulating the digestive powers, the nutrition and vitality of the individual are enhanced ; the resistance of the tissues is increased, and as a corollary, the affected organ shares in the general improvement."

This dictum has such wide application in every sphere of medical treatment, and its neglect is responsible for so many therapeutic failures, that it is worth while studying it a little more closely. The exhibition of a drug, without an examination of the general metabolic functions of the body in order to ascertain the prospects of its absorption, is an irrational proceeding and the neglect of the first condition of success. It is only necessary to mention the abundant failures in the treatment of anæmia which follow the orthodox administration of iron—failures which are converted into successes when the powers of assimilation are taken into account, and improved. Or, again, we may refer to the occasional impotence of quinine sulphate to exert its specific effect on malaria, solely because this salt fails to become absorbed. When, however, the easily soluble hydrochloride is substituted for it, the specific action of the quinine takes place without delay.

Unfortunately, there are not many diseases, like malaria, which possess a specific remedy. We are justified in saying that quinine cures malaria, mercury cures syphilis, thyroid extract cures myxœdema. It has been truly said that the greater the abundance of drugs in vogue for any special disease, the greater are the difficulties of treatment. It is notorious that failures most frequently occur in the very cases where the choice of drugs is particularly extensive. For example, rheumatoid arthritis enjoys a little pharmacopœia all of its own, ranging from salicylates and their new derivatives, arsenic, guaiacol, cod-liver oil, iron, iodide of potassium, to all varieties of physical therapeutics. Nevertheless, the disease is characterised by great obstinacy, and often constitutes the despair of the practitioner.

The diseases wherein the greatest successes are scored are, undoubtedly, the specific fevers. But it must be confessed that recovery from pneumonia, typhoid fever, or scarlet fever cannot usually be put to the credit of the drugs which have been employed. The recovery, in these circumstances, is a natural process effected by the normal physiological defences of the body against the invasion of pathogenic organisms. The drugs can do no more than relieve symptoms. The real victory over the disease is achieved by the immunising processes which take place. Rational treatment consists in encouraging and developing these processes. A whole system of therapeutics, which is based upon the production of active immunity is now in the making, and although considerable time must elapse before its precise value in medicine can be determined, it has already become abundantly clear that the first and foremost condition of success in treatment is the efficient working of all the physiological processes within the organism.

Some of the physiological processes are active in a state of health, but others are not evoked until the organism is attacked by disease. These latter, are, however, seriously handicapped and thwarted in their action unless the former are up to the normal standard. If the ordinary physiological processes of the body are defective, the reaction to disease will be indifferent. Drugs will refuse to act, and symptomatic treatment will prove a failure, until it is recognised that it is useless to deal with detailed damage to the structure unless the foundations are made secure.

The foundations of good health are based upon a normal metabolism, and the cardinal principle of success in treatment revolves around this as the central pivot. It is not too much to say that the failure of a curable condition to yield to treatment means a derangement of metabolism, and the practitioner would do well in all such obstinate cases to devote himself to the improvement of metabolism, rather than to ringing the changes upon drugs, or to despairing of effecting a cure.

It is hardly necessary to say that the term " metabolism " conceals no mysteries. Its meaning is simple, its connection with disease is quite definite, and its influence on treatment is beyond all doubt. Briefly put, *metabolism* is the name given to the series of changes which (*a*) begin with the food taken as nourishment and end with its conversion into a tissue cell, and also to the series of changes which (*b*) the cell undergoes during its vital activity, its processes of combustion and its disintegration into normal excretory products. The changes comprised under (*a*) are sometimes called *Anabolism*, those comprised under (*b*), *Katabolism*. Together they constitute Metabolism.

Errors in the process of the building up of cells (Anabolism) or in the process of their breaking down (Katabolism) are among the most fertile causes and consequences of disease. The persistence of these errors, and the neglect to remedy them, are likewise *the great causes of failure in*

(*a*) *The Practitioner*, May, 1913.

treatment. When the fault is along the path which leads to the building up of a tissue cell, we are confronted with some form of indigestion, in its protean varieties, or with a disease of malnutrition, *e.g.*, anæmia, neurasthenia, &c. When the fault is along the path by which normal combustion should proceed, and its products become abnormal, the diseases which result are mainly gout and diabetes. It is not, however, possible to separate all, or even most diseases into an anabolic and katabolic group in this way, because the toxins of so many diseases produce derangements both in the constructive and in the disintegrative processes of metabolism. Thus, tuberculosis, rheumatoid arthritis, the acute specific fevers interfere with assimilation on the one hand, and on the other hand give rise to toxic products of combustion instead of the normal excretory substances. These diseases cause wasting, owing to the inadequate cell formation and the too hurried cell destruction, and in these, convalescence or recovery is marked by an increase in weight.

It is obvious from the foregoing remarks that the restoration of healthy metabolism must be one of the guiding principles in the treatment of disease, and it follows that therapeutic failures must, as a rule, be put to the credit of the neglect of this principle.

Is this principle sufficiently emphasised in orthodox systems of treatment, and does the profession, as a whole, recognise its paramount importance in daily work?

It must be confessed that the general practitioner is only vaguely concerned with the problems of metabolism in his routine work, and that text-books of therapeutics hardly proceed in this direction much beyond a general recommendation, in most diseases of "good food, fresh air and sunlight." It is often pointed out that recovery from disease is encouraged by such improved conditions. A tardy convalescence is hastened by residence at the seaside, and obstinate anæmia begins to improve in the surroundings of a country life, and chronic indigestion will often refuse to yield until the patient has a "thorough change." The true reason that success attends these measures is, that they exercise an effect on metabolism and tend to restore it to the normal, and then the opportunity is afforded, either to nature or to art, to bring about a complete recovery. This endeavour to influence metabolism should therefore accompany the therapeutic measures which may be adopted in any case, and there can be no doubt that if attention to this physiological need became a routine principle in treatment, drugs would achieve more than they do at present.

BREAST FEEDING OF INFANTS. (*a*)

By ELLA G. A. WEBB, M.D.

It appears to be acknowledged in all discussions that the problem of infantile mortality is to a great extent identical with the problem of infant feeding; in other words, that the mortality from gastro-intestinal diseases is so high that if we could discover a universally suitable food substance there would be no infantile mortality problem to discuss. Writers on the subject of feeding generally preface their remarks by emphasising the necessity and importance of breast feeding whenever possible, but after a few general statements on this point, proceed to the discussion of the various kinds of artificial food, their chemical and physical composition, their drawbacks, their modes of preparation and so forth. In fact, we are too ready to say, "This woman cannot nurse her infant, let us seek to discover the best possible substitute on which to feed it"; instead of saying, "This woman cannot nurse her infant, let us seek to discover why, and remedy *that* defect." I am fully aware of the excellent work done on this subject by many members of the American school of pædiatrics, and in England by Vincent and others, but we still remain very ignorant of the forces governing the function of lactation. Why, of two sisters, one can nurse her children and the other cannot? What is the nature of the toxic products let loose in the milk by an ebullition of nervous emotion on the part of the mother? These and many other problems of this kind remain still unanswered; there is not even, so far as I am aware, a comprehensive list of the drugs that are excreted in the mammary secretion, thereby influencing the child.

With a view to gaining some information on the subject, I have for the last three or four years endeavoured to ascertain, in each case of a bottle-fed infant brought to me for treatment, what was the reason that the mother did not nurse it. I propose here, if you will allow me, to submit to you an analysis of 200 such cases. I am fully aware that this number is too small to be of very great value, but I venture to put the cases before you with a brief *résumé* of the measures I have found to be most useful in each class, in the hope that I may learn something from those of wider experience as to fresh lines along which to pursue further investigation.

The analysis of the reasons for giving up nursing in the 200 cases are as follows:—

1.—Insufficient milk	93
2.—Illness of the mother	35
3.—Milk disagreed with child	22
4.—Sore breasts	16
5.—Mother having to go to work ..	13
6.—Advised to wean by nurse or friend ..	8
7.—Child refusing to take breast ..	5
8.—Death of the mother	6
9.—Child having a hare lip	1
10.—Accidental illness of child causing great fatigue to the mother through wakeful nights, etc. ..	1
Total	200

The last three groups require no comment, though it may be said that in the case of the child with the hare lip an endeavour was made for some time to pump off the breast milk and feed it, but the supply gradually diminished.

Classes 6 & 7.—With regard to the refusal of the child to take the breast and the advice of the nurse and friends, I should like to point out that all nursing, particularly in primiparæ, is difficult at the beginning. The recumbent position of the mother, her inexperience and possible awkwardness, the small and undeveloped condition of the nipples, all tend to put difficulties in the way of the already reluctant and worried infant, and we are all familiar with the spectacle of an anxious and perspiring mother clasping to her breast a bawling infant that cannot be persuaded to cease from its protestations sufficiently to close its widely open mouth on the nipple!

I bracket this class of case along with those in which the nurse advises bottle feeding, because there is no doubt that here nothing but great determination and still greater patience on the part of both nurse and mother can win the day, and if either fail, the result is that the baby conquers, and resorts to the easier method of a bottle with a rubber teat containing a large hole! I am sorry to say in most maternity nurses there lurks a desire to bottle-feed the infants in their care. I know it is contrary to all their teaching, and I can give no reason for it. It is often not shown to the doctor, but the desire is there, nevertheless, and until it can be thoroughly uprooted, many babies will be handicapped in the race of life. As far as I can

---

(*a*) A paper read before the Section of Obstetrics, Royal Academy of Medicine in Ireland, May 23rd, 1913.

make out, the reason that some officious friends advise weaning is that the bluish, somewhat translucent appearance which human milk naturally possesses, gives rise to the idea that it is "poor" and of no nutritive value. The best remedy for these errors, I think, is wider instruction of nurses on the nature and normal appearance of human milk and also on the intelligent and more frequent use of the nipple shield to assist the child in its early efforts.

With regard to class 5, viz., industrial occupation of the mother, it strikes one at once how very low the percentage of cases in Dublin is (viz., 6.5 per cent.) compared to manufacturing towns, but even here the establishment of well-managed crêches, in various parts of the city, open from 6 a.m., would greatly facilitate the mother returning to nurse her child at different times in the day.

Class 2—"Illness of mother" may be passed over without comment except to note that about one-sixth of the total cases were of pulmonary tuberculosis.

Class 4—"Sore breasts" (8 per cent.).—Under this heading I include both breast abscesses and also minor troubles such as cracked nipples, etc., which by the pain they cause deter the mother from nursing. Measures to avoid weaning fall under three headings, viz. :—

(1) Preparation of the breasts.
(2) Prevention of infection during lactation.
(3) Intelligent use of the breast pump and nipple shield in cases where the breast has already become sore.

Very few women of the poorer class make any effort during pregnancy to prepare their breasts for nursing, and among those that do, the method employed is inadequate, consisting simply of occasionally rubbing the nipple with some form of alcohol and pulling it slightly with the fingers. The result of this treatment is frequently to cause the cracks and abrasions the women are trying to avoid. I have found that the constant use of alcohol alone renders the skin much too dry. To prevent this, after the alcohol has evaporated some boracic ointment should be used while the drawing out of the nipple is performed. I should like also to point out that manipulation with the fingers is not—and never can be, sufficient preparation for the virgin nipple. The pain in early lactation is caused by the forcible *eversion* of the partially *inverted* tip of the nipple, and pulling it with the fingers cannot help. It is best effected by gentle suction when the part is pliable with ointment. This suction can be effected either by a breast pump, a tetarelle, or by a cheaper instrument, namely, an ordinary new clean clay pipe which after being boiled and smeared with boracic ointment is used with the bowl over the nipple and the stem in the woman's mouth.

The prevention of infection, when lactation is established, is the next problem. It may take place along the tubules without any visible crack or abrasion, and I have found that washing after each feed even if dutifully performed is of little use, as some milk always oozes on to the surface and clothes immediately afterwards. The most efficacious plan I know of is to instruct the mother always to wear a small pad of boracic wool over the nipple, protecting it from the clothes, and I have never known any infection to occur when this was constantly done, even in cases formerly much troubled with incipient abscesses.

If pain and redness do appear, fomentations are of great service, but I have found far better results from the use of large pads of wool, soaked in pure glycerine applied hot, or in the more elegant form of the same drug, known as "antiphlogistine." This if applied in time nearly always averts the dreaded suppuration. In any painful condition of the nipple a shield should be used, and nursing can often successfully be performed by its help under most unfavourable conditions.

Classes 1 and 3 (*i.e.*, insufficient milk and milk disagreeing with the child) may be taken together as cases where the child does not thrive on the milk, but for purposes of scientific investigation they may be divided, not according to the statement of the mother but into 4 groups, viz. :—

(*a*) Insufficiency in the quantity of milk.
(*b*) Insufficiency of some particular element.
(*c*) Undue preponderance of some element causing disagreement with the child.
(*d*) Presence of toxic substances.

It is on the correct diagnosis of the reason why the milk disagrees that the only hope of remedy depends.

At the beginning of my investigations I naturally tried to find what substances were supposed to lead to increased milk production in cows. Knowing the great difference in percentage composition of human milk that may be caused by change of diet, I was greatly surprised to find that apparently most authorities agree that change of "rations" makes very little change in quantity or quality of cows' milk, compared with the value of breeding and favourable nervous conditions. There seems to be no doubt, however, that in the case of human beings, variations can easily be caused in total quantity, in proteids, and in fats. Lactose seems to remain fairly constant in amount.

With regard to quantity—some women seem to have suitable milk ; only that, in the case of a big hungry child, or with twins, there is not enough of it. These cases are undoubtedly helped by the ingestion of large quantities of fluid. Soup, gruel and even plain water should be taken in large quantities. Most women, as a rule, take too little fluid, and this point should be emphasised. The urine is, of course, thereby increased, but that does not alter the fact that the milk is increased also. Violent exercise, causing much perspiration, should be avoided, as well as nervous fatigue. Gentle and careful massage of the breasts is of use, and the child should be given both breasts at each nursing in order to stimulate them.

Alcohol undoubtedly increases the quantity of milk, but is unadvisable for many reasons. The chief one that concerns us at present is that it frequently upsets the child's digestion. Malt increases the quantity of milk as well as the fat present. If ordinary malt extract is disliked, malt can be given in a variety of other ways, such as malted cocoa, malted milk, and by means of preparations such as Mellin's Food, Ovaltine, etc.

I must also mention a preparation which, although I was familiar with it abroad some time ago, has only recently been introduced into this country. It is called "Lactagol," and its manufacturers state that it is a preparation of cotton seed, its galactogenic properties being due to a substance named "Edestin" which it contains. The constitution and action of "Edestin" have been investigated by Beckman of Hamburg, who states that in his opinion, the *quantity* of proteid in various foods cannot have a decisive influence on the galactogenic action, but, on the other hand, the *composition of the proteid body* seems to play a *rôle*, for we see that the amides, the splitting up products of the proteids in malt grains, have a similar action to that of the edesten of the cotton seed meal.

He adds : "Edestin received its name from Osborne, who studied it closely. It has also been put to practical use by Zadik and Hausmann. It contains 42.3 per cent. of the total nitrogen of the cotton seed meal, and is constituted as follows :—

Carbon	51.71
Hydrogen	6.86
Nitrogen	18.64
Sulphur	0.62
Oxygen	22.17

"The phytovitellines to which edestin belongs are characterised by a high nitrogen value and a low oxygen value. On splitting up they produce a large quantity of diamin acids, that is to say, products such as arise in the changing of the proteins in growing plants.

"If the galactogenic action of the malt grains is to be referred, as suggested by Maercker, to the amides then the galactogenic action of lactagol is explained, for the tryptic digestion of edestin furnishes the same bodies as are brought into existence in malt grains through enzymes, which act in the plant cells."

The results of the quantitative hydrolyses of "Edestin" recently published, which were carried out by Aberhalden under the direction of Emil Fischer, give an indication of the cause of the specific action—namely, a very large proportion of argenin over the other two products of splitting the proteins, *i.e.*, lysin and histidine.

Beckman used "lactagol" as the substance with which to conduct his experiments, and got favourable results both in cows and women. With the former he got a rise in the fats of from 3 to 3.9. In the proteins of from 3.2 to 3.7, and in the total amount of milk a rise of from 13 to 17 litres per day. I cannot quite reconcile these results with the statements of Kelner and Jordan, but with regard to human milk secretion I can heartily endorse them. I have always found a rise of at least two or three points in both fats and proteids, as well as a great increase in the total quantity of milk. I also used the preparation in twenty cases in which the infants' weights were stationary or diminishing, chiefly through malnutrition from extreme poverty in the mother, and got a rise in weight of from 3 to 6 oz. per week in all but one case. (I may add that I consider this a better test than any rise in percentage composition.) The only disadvantage I have found from the use of this substance is that it occasionally causes indigestion in the baby by raising the proteids too high. For this reason I usually give less than the prescribed amount, and watch the cases carefully at first.

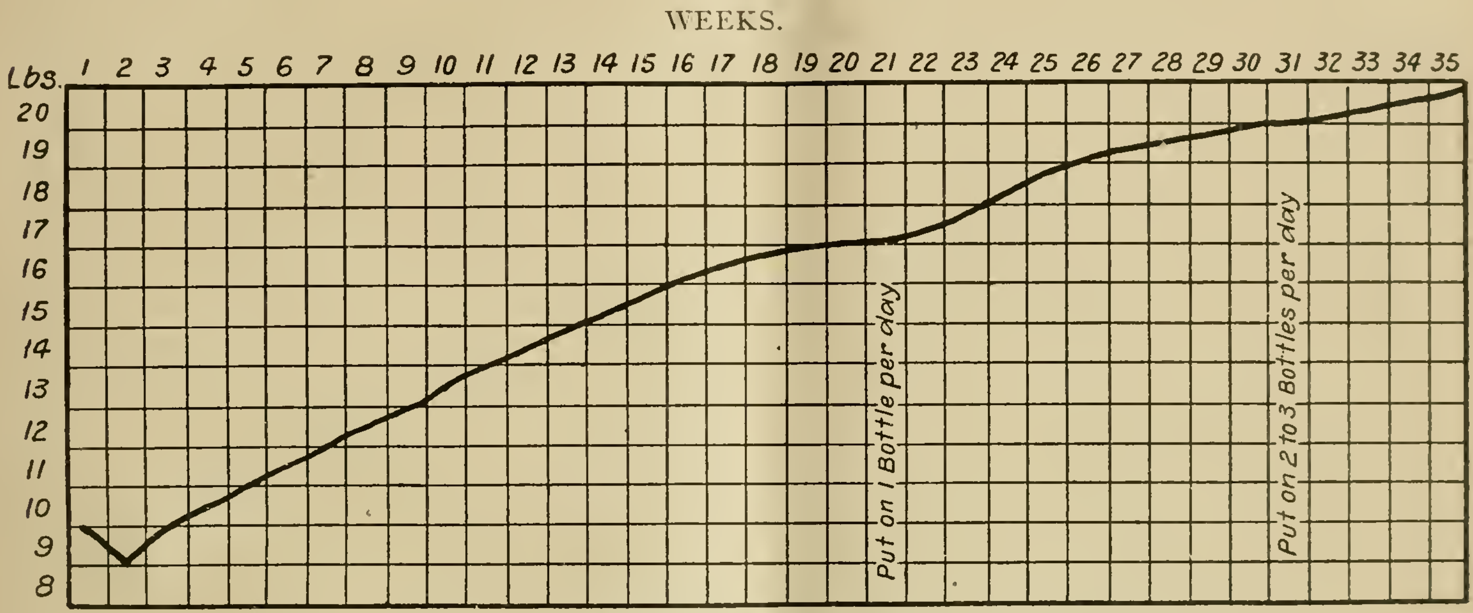


Fig. 1.—Showing rise in weight on the addition of one bottle each day.

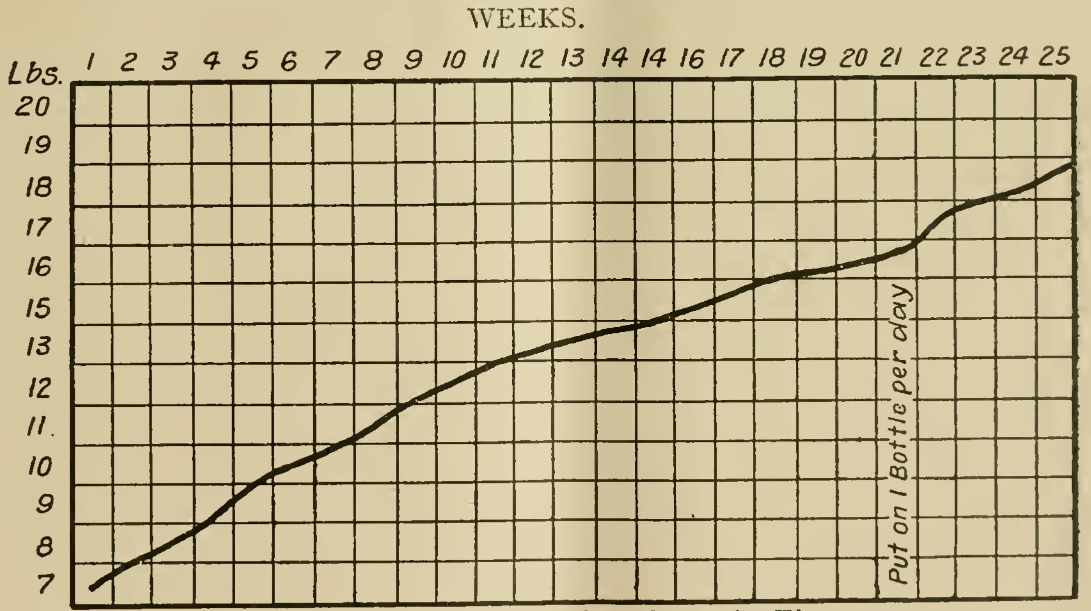


Fig. 2.—A similar case to that shown in Fig. 1.

If it is found to be impossible to obtain a sufficient quantity of milk for the requirements of the child, I strongly advocate mixed feeding (that is to say, the giving of one or more bottles in the day) rather than weaning. I know, in giving this opinion, I am going against that of so great an authority as Vincent, but I do so for the following reasons:—

(1st) The extremely good results I have always obtained by it. The accompanying charts are two taken from many indicating the success of this method. (Figs 1 and 2.)

(2nd) That weaning is thereby rendered much easier on both mother and child, because it is gradual.

(3rd) Because in cases of long journeys, accidents to milk supply, illness, etc., there is always the breast to fall back upon temporarily.

The difficulty of knowing the strength of milk to give from the bottle can be overcome by an occasional analysis of the breast milk.

Next, with regard to lack of some particular element. The average composition of human milk is :—

Proteins	1.5 per cent.
Fats	4 ,,
Lactose	7 ,,

The element which most frequently falls below the standard is fat. It can be increased, however, by a good nourishing dietary—particularly one that is rich in protein—by the administration of malt extract (according to Holt this last can raise the fat percentage from 1.74 per cent. to 3.83 per cent.) and by the aforementioned lactagol.

Also, if the supply of milk is abundant, but the fat low, the child can be fed on the latter part of the milk from each breast, the "fore milk," which is high in proteins and low in fat, being drawn off with a breast pump.

The proteins generally give trouble by being too high rather than too low. They are generally supposed to be increased by over-feeding and lack of exercise, and can be diminished by regulating the diet and getting the mother to take long walks, to scrub her floor, or take some other form of active exertion. Vincent quotes two cases, however, in which the proteins were raised over 3 per cent. by reason of the mothers leading *too* active lives, going too much into society and being over-excited. The infants, who were both upset, recovered when a quiet life was again enforced.

Undue amount of protein is generally recognised by indigestion and the passage of undigested curds in the motions. It must be remembered, however, that all that a mother calls curds are not necessarily protein. Fat " curds " are very common, but are easily distinguished by the ether test.

Cases where the fat is too great in amount are usually recognised by undue looseness of the bowels on the part of the infant. This may be regulated by giving less protein in the mother's diet and by not letting the infant empty the breast, as the last part is particularly rich in fat.

Infants seem to vary very much as to their tolerance of extraneous substances excreted in the milk. The diet of the mother as regards fruit and vegetables should, at first, however, always be tentative. Three articles of food I have found nearly always to be injurious, viz. :—Cabbage, onions, and rhubarb. They are therefore better left alone. It is nearly always the case when the mother eats much vegetables or fruit that the infant's motion become green. Too much importance need not be laid on this, however, if it is unaccompanied by any symptom of discomfort and if the increase in weight is constant.

A difficulty frequently arises when the mother requires laxative medicine and the infant does not; the only purgative I know that does not affect the milk is castor oil, and its continual administration is generally objected to by even the most self-sacrificing of mothers! A good deal may be done, however, to stimulate the mother's peristalsis by substances containing some indigestible residue, *i.e.*, porridge, Frame food, etc., by petroleum emulsion in some form, and by massage.

Much more serious are the toxic products which appear in the milk as the result of mental excitement and worry. In this particular the resemblance to cows is much greater than as regards food. Kelner and Jordan both agree in ranking " the feeling of comfort and well being " as foremost in importance from the point of milk supply, while " anything that upsets a cow " is considered to have a worse effect than bad feeding. Vincent quotes the case of a cow whose fats dropped from 3.6 to 1.8 in the show yard. It should be noted that it is *worry* and not *work* that causes these bad results. I know many women who do an extremely hard day's work—either mental or physical—who still nurse with ease and success. Holt says: " It is the nervous condition of the mother more than anything else which determines her success or failure as a nurse," and I am sure all who have had experience of cases of this kind must agree with him. It is here that the physician feels most helpless, for although it might seem natural that a mother would consider her child's health of greater importance than the polish of her brasses or the deportment of her servant, such is not always the case, and in spite of warnings, constant worry over unimportant trifles defeats all the doctor's efforts, and at last necessitates the substitution of artificial food.

One reason for abandoning nursing I have not put on my list because it was never given me in so many words—that is, unwillingness on the part of the mother. I do not doubt, however, that it was the true cause in a few cases, and as such we ought to bear it in mind. I do not think that any good mother who had experienced the comfort, convenience, and economy of nursing, as compared to bottle-feeding, would willingly depart from it, but young primiparæ are sometimes unwilling to undertake the task. Here the medical and nursing professions can do much in the way of instruction and preparation, by showing the young mother that nursing is healthy for her as well as her child, and is very far from being the strain and the bondage that her friends would have her believe.

This brings me to the most important part of the whole question. So far I have only suggested remedial measures to be undertaken at the time. In reality we should begin to prepare our ideal nursing mother long before she herself is born! We are still much in the dark as to what promotes or hinders the possibility of lactation, but it is generally acknowledged that it is artificiality and civilisation rather than poverty or starvation that render the numbers of nursing mothers so low. Crookshank, in a recent article in the *British Journal of Children's Diseases* lays stress on what he calls the biological value of food. He says: " The wife of a cottager is better fed biologically on wholemeal bread, even though black; on fresh milk, even if skimmed; on home-made cheese, even though sour, and on oatmeal, even if savoured with salt only; than is her town-dwelling sister on frozen mutton, tinned tomatoes, condensed milk, and packet tea."

How much the diet may affect the possibilities of the child that is to be born, has, of course, still to be investigated, but we may fairly consider that the eugenist's plea for more simplicity and less artificiality of life may be put forward also by the doctor interested only in the problem of the nutrition of the child.

Another question which has not yet been answered is how far the mother's diet during pregnancy affects her powers of lactation subsequently. So far as I can ascertain, most women who have been on a carbohydrate diet for fear of eclamptic complications have been unable to nurse their infants, but I should like very much to hear the experience of others on this point. The theory is rather contradicted on the other hand by the fact that the poor woman whose diet is often nothing more than bread and tea makes an excellent nurse. In fact, it is often to me a matter for wonder how well the very poor do nurse their infants. It certainly tends to show that a careless happy-go-lucky frame of mind (for I have never seen a tenement house dweller give her infant indigestion by fretting over the dirt of the stairs) may achieve a result which hard work and lack of food cannot counteract.

In conclusion, I may, perhaps, be permitted to add a few hints as to the clinical examination of milk. While there is no doubt that a complete chemical estimation is best, and is frequently necessary, still there are various rough methods of gaining some knowledge of its composition.

(1) Colour.—To those who accustom themselves to looking at samples of human milk, the rich cream colour due to high fats or colostrum is at once apparent.

(2) In ordinary cases the first half-ounce or so that flows it almost clear. If this is white and milky, the fat is usually high.

(3) By means of Holt's cream gauge the gravity cream can be read off after standing for 24 hours. The percentage of fats can thence be calculated, as it is in proportion to the cream as 3 to 5.

(4) A rough guide to the proteins may be obtained by knowing the fats and the specific gravity. The normal specific gravity is 1030, and if the specific gravity is high, while the fats are normal, the proteins are probably high also, as, of course, proteins raise the specific gravity while fat lowers it.

The milk for analysis should always be taken from a mixture of the whole contents of the breast.

The quantity of milk obtainable can best be ascertained by weighing the infant before and after feeding.

Finally, I should like to add that I am fully aware of the shortcomings of these investigations, and can only say that I have mentioned nothing that I have not ascertained by careful personal observation and experiment, and only because of this can this paper claim any merit. It is written in the hope that others may be led to make further investigations on their own cases, which will lead to more extensive results, and bring about the improvement in this matter which is so badly needed at the present day.

OPERATING THEATRES.

LONDON HOSPITAL.

Gastro-jejunostomy.—Mr. James Sherren performed posterior gastro-jejunostomy on a patient 15 months ago. She then had a large saddle-shaped ulcer situated on the middle of the lesser curvature, the posterior portion of the ulcer involving the pancreas. A portion was removed for microscopical examination; it showed no evidence whatever of malignancy. She had been suffering off and on from "indigestion" for four years, having had typical attacks of severe pain after food, accompanied by occasional vomiting, which relieved it. During the last two attacks she had hæmatemesis. After the operation she remained perfectly well for twelve months; her old symptoms then returned.

Mr. Sherren remarked: What we have to consider is the condition underlying the return of symptoms. Chronic gastric ulcer, wherever situated, heals after gastro-jejunostomy, and the patient remains perfectly well in over 80 per cent. of the cases, almost well in another 16 per cent., relapse in about 3 per cent. There are two possible explanations—(1) that the ulcer has not healed; (2) that a jejunal ulcer has formed. We shall probably find the former; the position and character of the pain is unlike that in jejunal ulcer following gastro-jejunostomy. This patient has most of her pain at night, and it is situated in the epigastric region. In chronic jejunal ulcer pain comes on regularly after a meal, is usually felt in the region of the umbilicus or just to the left of it, and is often relieved by taking food. Another point telling against jejunal ulcer is the fact that acidity, both free and total, remains low as the result of her operation.

The abdomen was opened through the right rectus muscle; the abdominal cavity was found free from adhesions; the gastro-jejunostomy was perfect. The anterior part of the ulcer and that on the lesser curvature had completely healed, but the posterior portion of the ulcer remained eroding the pancreas.

Mr. Sherren proceeded to do a partial gastrectomy, dividing the stomach at its pyloric end between clamps, and closing the pyloric end with a through-and-through continuous stitch of chromic catgut, buried by a similar one of 00 silk. The stomach was then separated from the pancreas, and it was found that the floor of the ulcer was formed entirely of this viscus. The ulcer and the neighbouring portion of the stomach were removed, and the wound in the stomach sutured in a similar manner to that at the pyloric end. A gauze drain was carried down to the bare area on the pancreas and the abdominal wound closed in layers The gauze was removed at the end of 48 hours. Microscopical section showed the condition to be a simple ulcer, and the patient left hospital for a convalescent home 17 days after her operation.

Mr. Sherren remarked that this patient bore out his recent experience that posterior gastric ulcers adherent to the pancreas, particularly those in which perforation had taken place and the floor was formed of pancreas, rarely healed as the result of gastro-jejunostomy. This case was particularly instructive in that a large portion of the ulcer situated on the anterior surface of the stomach and on the lesser curvature had healed completely, leaving only that portion which was adherent behind.

The surgical treatment of chronic gastric ulcer consists in gastro-jejunostomy combined with infolding or excision of the ulcer if this is situated on the lesser curvature, although Mr. Sherren does not look upon this as essential; he does it as an additional safeguard. When the ulcer is posterior and adherent it should always be excised. In many cases this can only be satisfactorily done by the trans-gastric method, in these gastro-jejunostomy is not always carried out; but in every case other abdominal lesions, such as gall-stones and chronic disease of the appendix, should be looked for.

It may have been noticed that the present patient has a scar in her right iliac fossa. Mr. Sherren removed her appendix through a separate incision, as has been his custom for several years. It was, as usual, of the fibrotic type, and was kinked into C-shape by an adhesion running from its tip to the cæcum.

Treated on these lines, Mr. Sherren is of opinion that even better results than those he has given will be obtained in the surgical treatment of chronic gastric ulcer.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, May 23rd, 1913.

The President, Dr. A. J. Horne, F.R.C.P.I., in the Chair.

SOME SEQUELÆ OF LABOUR.

Dr. Bethel Solomons read a paper on the above, in which he submitted the results of examining 543 primiparæ on the sixteenth day of the puerperium.

The President said the paper opened up a new field, and obstetricians should insist on the thorough examination of their patients before discharging them. He was astonished at the very high percentage—*i.e.*, 48—of lacerations of the cervix uteri which were found to have occurred in primiparæ, but, of course, the lacerations varied from one-third to an inch. He considered that if that large number of lacerations of the cervix occurred one would expect severe *post partum* hæmorrhage, and it should cause the obstetrician to try to find the origin of the hæmorrhage, and he would deem it a duty to stitch the cervix immediately. He thought that most of the backward displacements he frequently found were congenital and unimportant, and no matter what treatment might be carried out, at the end of two months, if the patient was again examined, the displacement would be found to have recurred. He suggested that if the patient was examined two months after confinement it could be ascertained if there was any real displacement, and an opinion could then be formed as to the treatment necessary. He looked on it as a duty to suture a ruptured perineum at once. Catgut sutures very often became absorbed too soon, and in his practice he invariably used the ordinary silk-worm gut, and found it successful. He had not yet adopted early rising, and from what he had heard he would be chary in doing so.

Dr. Hastings Tweedy said that Dr. Solomons' statistics of lacerated cervices would come as a surprise to many. It had been asserted by an eminent Fellow of the Academy that such tears did not occur in normal delivery. This view was in the main true, but was subject to exceptions, for he (Dr. Tweedy) had reported tears after perfectly normal child-birth. Posture had no effect in bringing about a condition of retro-displacement, which owed its origin to the presence of a full bladder or to congenital defect in the majority of cases. An improperly applied binder was another direct cause, and one that was seldom appreciated. Before the application of a binder the uterus should be sharply anteflexed, and the third pin should be placed so as to groove the binder above the uterus and fix the latter in a condition of anteflexion. Pulmonary embolus was a septic condition, and did not arise in consequence of getting the patient up too soon. It was, moreover, associated, in his experience, with a quick pulse. He had no faith in the power of calcium lactate to stay the progress of a septic clot.

Prof. Thompson said that he did not consider that calcium salts administered by the mouth or hypodermically had the effect of hastening coagulation.

Dr. Spencer Sheill said he had seen many backward displacements of the uterus produced by tight lacing of the corset before complete involution had taken place. The maximum coagulation resulted from calcium salts if administered at broken periods.

Dr. Allan said he had never found calcium salts of much use in helping coagulation. He had found that in suturing the perineum catgut alone did not give as good results as silk-worm gut, or a combination of both. He inquired if the time at which the suturing was done had not an effect on the morbidity. While one did not like putting forceps on the undilated os, he pointed out that Dr. Johnston stated that he had proved that he could do so without any evil effect.

Dr. Solomons, in reply, said that his experience of the calcium salts only extended to cases of threatened abortion, miscarriage, or premature labour, in which he had found them of very little influence. He was unable to say whether perineums united better when stitched immediately or some hours after labour. He was convinced that when forceps were applied to a cervix which was not fully dilated a tear always resulted. He agreed that 48 per cent. of tears in his series was greater than the ultimate results would have shown, but the paper was based on examinations made sixteen days after confinement, and he felt sure that a great number of the tears then apparent would afterwards heal. He considered that a capable nurse could apply a binder better than a doctor, who got much less practice. He thought that although the constant dorsal decubitus was the most common cause of *post partum* retroversion, he did not exclude insufficient emptying of the bladder and other conditions as possible predisponents.

BREAST-FEEDING OF INFANTS.

Dr. Webb read a paper on "Breast-feeding of Infants," which will be found under the heading of "Original Papers," on page 13.

Prof. Thompson said the consideration of the physiological aspect of the question was difficult as so little was known about the physiological stimuli that promoted the secretion of milk. He referred to a paper by Dr. Janet Lane-Claypon, recently reviewed in the *British Medical Journal*, on "The Investigation of the Question of Milk and Lactation." No one had yet succeeded in discovering a nerve, the cutting or excitation of which interfered in the slightest with the secretion of milk. The general opinion was that if the mother was getting sufficient ordinary food she produced as much milk as she would on any special food. He was not a very strong believer in the influence of proteins in increasing the constituents of milk. The only constituent of milk that could with certainty be influenced by the diet was the fat. It was quite possible that milk as regards proteins might become undesirable from an alteration in the relative amount of caseinogen. The practical points brought out in the paper struck him as very useful.

Dr. Hastings Tweedy said mothers and nurses were very fearful of starving the infant. He had observed that breast milk became, as a rule, very scanty on or about the sixth or seventh day, and it was at this time bottles were usually begun. The introduction of bottle-feeding forty-five years ago constituted the most disastrous experiment that the human race ever embarked on. Its condemnation did not entirely rest on the high rate of infantile mortality; more serious still were the ill consequences in after-life inflicted on the infant who worried through a succession of stomachic disorders, or other debilitating illnesses. He could declare, from observations made in his own practice, that bad teeth in the adult seldom occurred in those whose infancy and young childhood had been free from disease. It was evident, too, that permanent defect could not be limited to the teeth. Bones, muscles, brain, skin, etc., must also suffer. Children could deal with excess of some particular constituent in food; this was shown by the splendid results obtained in the whole-milk method of feeding. He did not think that infants should be placed on measured amounts of food. Let them be given what they could digest, at intervals not shorter than three hours. If they threw up, regurgitated, or got diarrhœa of the kind which immediately followed on ingestion of food, urgent indications were thereby afforded that a smaller quantity should be given. More infants were injured by excess than by deficiency.

The President said it was the experience in maternity hospitals that a very large majority of women did nurse, and he believed the mothers amongst the poor were able to nurse for a very long time. Food, undoubtedly, seemed to militate against the secretion of milk or the reverse. He recalled his experience when wet nursing was in vogue—*i.e.*, that over-feeding was one of the chief means of insufficiency of milk. He agreed with Dr. Webb with regard to the application of alcohol to the nipples in preparation for nursing, and also as regarded the pulling out with the fingers instead of with a breast-pump or other such instrument.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, June 12th, 1913.

The President, Dr. David Walsh, in the Chair.

Dr. H. Samuel showed (1) a young man with granuloma annulare. The lesions were irregularly nodular and circinate, and were distributed upon the dorsum of the hands and neighbourhood of the knuckles. One had been excised and examined microscopically, and this had given the appearances usually seen in granuloma annulare.

Dr. Alfred Eddowes inquired as to the real origin of the condition, whether around the vessels or in vicinity of the follicles.

Dr. Norman Meachen referred to the exhaustive monograph by Dr. Graham Little upon the disease (*Brit. Journ. Derm.*, vol. xx., p. 213). He was struck by the multiplicity of the lesions, as the cases he had previously seen were unilateral.

Dr. P. S. Abraham thought that some of the lesions were umbilicated. He was not at all sure of the diagnosis at the present stage, and he suggested a careful examination of a scraping.

(2) A young woman with erythema multiforme. The lesions would last about six weeks, and at the time of the meeting a raised patch was present upon the ulnar side of the left wrist. The dentition was very bad.

(3) A case of pityriasis rosea in a little girl, æt. 11, showing the typical herald patch upon the trunk. The exhibitor wished especially to call attention to the association of seborrhœa capitis with pityriasis rosea which existed in the present case. He thought that the majority of cases of this affection presented a pityriasis capitis at the same time.

The President thought that the disease was definitely self-limited, and that it was not necessarily accompanied by pityriasis capitis.

Dr. Meachen remarked that the two affections were absolutely independent. He considered that in pityriasis rosea of Gibert we possessed a valuable factor in diagnosis which was not always a true guide in skin diseases—namely, colour, which was quite characteristic of the condition.

Dr. Eddowes thought that it would be a good thing to determine the presence or otherwise of the bottle bacillus of seborrhœa in the lesions.

The President showed a vertical section of the skin from a case of alopecia areata in a woman, showing micrococci lying in the lymph spaces, thus confirming Robinson's observations. The patient also had a slight degree of exophthalmic goitre.

Dr. Dennis Vinrace showed (1) a case of multiple sarcoma of the skin ("tomato growths") in a man, æt. 65, a clerk. His mother was said to have had a similar lump over her collar bone, and she lived to be 82. His father died six years ago at the age of 84. The patient stated that the first lump, about the size of a hen's egg, appeared about twenty years ago upon the left clavicular region. This was painless, but other similar tumours appeared about five years ago, and the last one was the largest and most painful. The tumours were reddish, fleshy and sessile. He had had no treatment. A coloured drawing of a similar condition was also shown from *Nosologie*

Naturelle, Tome I., 1817, Paris, p. 548, by Alibert, under the description of "Cancer globuleux."

Dr. G. W. Sequeira agreed with the diagnosis of sarcoma. He considered that the history corresponded to the cases described, and he referred to a case under his own care in which the growths were upon the abdomen. He thought that radical treatment often did more harm than good, whereas the injection of arsenic hypodermically was sometimes beneficial.

Dr. C. G. Mack referred to a case of sarcoma of the skin occurring in an elderly female, commencing behind the ear. Other growths rapidly appeared in various parts of the body. Some were excised. After the last excision it was noticed that the remainder did not grow more rapidly—in fact, the patient died of another disease.

Dr. Samuel did not see why surgical means should not prove successful if the growth were primary.

The President thought that the growth was free, not involving the deeper structures He suggested the use of Coley's fluid and free excision.

Dr. Abraham felt inclined to try an injection of salvarsan to begin with, also to make a clean sweep of the growth, and then he would commence a course of X-rays.

(2) A woman, æt. 45, with lupus erythematosus of the scalp of eight years' duration. The hair had fallen rapidly since last December. Liquid paraffin had been used in the treatment. A little atrophy was also seen along the margins of the ears.

Dr. Meachen said that were it not for the fact that in the present case there were evidences of slight disease affecting other parts, it would be almost unique, for ulerythema of the scalp alone was very rare. It was by no means uncommon to find the disease associated with tuberculosis, and he instanced a case shown by him some years ago at the Dermatological Section of the Royal Society of Medicine of a woman who had lost eight children with varying manifestations of tuberculosis, she herself suffering from ulerythema of the scalp.

The President remarked that a good many cases of lupus erythematosus gave a positive von Pirquet reaction. He would be inclined to give tuberculin, or at any rate a test injection.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, June 28th, 1913.

At the Fifteenth Meeting of the German Society for Gynæcology one of the principal themes of the Congress was the

Relation between Diseases of the Heart and Kidneys and Pregnancy, Labour and Childbed.

The subject was introduced by Hrn. Fromme, Berlin. The doctrine of hypertrophy of the heart during pregnancy could not be maintained, but there was a strengthening of it during that period. There were cardiac complications in about 20 per cent. of the cases in pregnancy. Of 300 women with disease of the heart during pregnancy 3 died during the pregnancy, or the labour, or the puerperium. Eighty per cent. of the cases had no heart trouble—*i.e.*, no symptoms—during these periods. In from 5 to 9 per cent. there was premature labour, in from 4 to 8 per cent. abortion. The condition of the muscles of the heart was the decisive factor. Women with myocarditis were especially in danger. Women who showed no symptoms on the part of the heart at these periods were not in need of any treatment; dietetic measures were all that was needed. In cases of slight disturbance, medicinal treatment was called for in every case in the first instance, also in greater disturbances in primiparæ, who suffered with heart disease, before the pregnancy set in, and there had been no compensation and in multiparæ in whom the previous labours had been normal, and there was no higher degree of disease of the heart muscles. If medicinal treatment was not responded to at once, interruption of the pregnancy was proper at any time, and also when symptoms of decompensation came on at intervals. Termination of the pregnancy should not be delayed too long in cases where, before the pregnancy, there were compensatory disturbances, or where there had been serious cardiac troubles in the previous confinement. Where compensatory disturbances appeared during the labour it should be terminated manually by operative extraction of the child. Young girls who before marriage showed serious compensatory disturbances should be very earnestly advised not to marry.

Hr. Heu discussed the treatment in the cases alluded to by the first speaker. In any case of the complication of pregnancy plus cardiac disease that required treatment at all, such treatment should be adequate. It consisted in a suitable digitalisation of the heart. For the treatment of all serious cases of decompensation the endovenous treatment by strophanthus of Fraenkel was for the present the best. Interruption of the pregnancy under any circumstances should be deprecated until a trial had been made of the treatment mentioned; and under the condition that the patient should submit to be made sterile. Women with plain indications of a tendency to failure of compensation should not be allowed to marry. With signs of insufficiency in the early stages of pregnancy the uterus should be emptied with as little disturbance as possible. The surgical means of inducing labour should be made use of as little as possible, as the sudden shutting off of a circulation was a dangerous proceeding. Narcosis by inhalation in heart cases was a grave matter.

Hr. Jaschke treated of kidney disease in diseases of the heart in women who were pregnant. Normal pregnancy as well as all diseases of the kidneys called for extra efforts on the power of the heart. But the quickly changing calls during labour were of the greatest importance. Although simple valvular disease in pregnancy was not of grave prognosis and irreparable failure was met with in only from one-half to one per cent., the prospects were much more clouded when to this was added a hypertonic disease of the kidneys. When these complications were met with in any case delays must be avoided, the uterus should be emptied at once.

Hr. Kreiss, Dresden, discussed disease of the heart in pregnancy. In 23,577 labours, including abortions in the Dresden Klinik between the years 1903 and 1912, the pregnancy was brought to an end manually 26 times on account of excessive decompensation in disease of the heart. Amongst these there were 16 cases of mitral disease, three affections of the aorta, seven of disease of the cardiac muscle. Of these 26 patients four only died, taking away two that died of sepsis, or only 7.5 per cent. As regarded the question of the interruption of the pregnancy they took the following conservative position:—First, attempts were made to correct the decomposition by medicinal measures. If these failed recourse was at once had to artificial termination of the pregnancy. On the ground of their own experience manual measures were taken in hand without a previous trial of medicines in congenital stenosis, in pericarditis with exudations, in recent endocarditis with pronounced insufficiency, in kyphoscoliosis as well as in cases in which the heart mischief was associated with tuberculosis, nephritis, pernicious anæmia, and enlarged thyroid. Such complications were met with in 50 per cent. of all the cases, nephritis in 34.6 per cent. If the child was believed to be viable either the vaginal or the classical Cæsarean section was resorted to; the first, however, they declined when the symptoms of stagnation of the circulation were prominent, recourse was then had to the classical operation, and if possible under lumbar anæsthesia. In a few serious cases they employed metreurysis (14 time in the 26 cases); atonic flooding was met with in three cases. As regarded the 16 viable infants four died, equal to a mortality of 30 per cent.

AUSTRIA.

Vienna, June 28th, 1913.

SPLENECTOMY FOR PERNICIOUS ANÆMIA.

AT the recent meeting of the K.K. Gesellschaft, Dr. A. von Decastello exhibited a patient, æt. 52, on whom the operation of splenectomy had been performed for pernicious anæmia. In October of 1912 a sudden attack of fever set in, which was accompanied by acute cervical pains and great lassitude. After a few days the skin became markedly tinged with a golden yellow. In December following the patient presented a typical picture of advanced anæmia, accompanied by distinct icteric tinging of the skin and sclerotic. There was also œdema of both legs, and retro-ocular hæmorrhages had taken place. The spleen extended beyond the costal margin to the extent of two fingers' breadth, in the form of a solid tumour. The liver was also easily felt and dense, with a sharply defined margin. The urine was dark in colour; it presented no biliary colouring matter, although there was a great deal of urobilin. The alvine evacuations were deeply stained. Examination of the blood gave:—Erythrocytes, 1,236,000; hæmoglobin, 29 per cent.; colour index, 1.2; leucocytes, 2,600; with 43 per cent. lymphocytes. Among the erythrocytes were abundant macrocytes and gigantocytes, with intensely basophile coloured cells; Jolly's corpuscles and Schleip's rings, and spot formation were also observable throughout. Among the leucocytes, the pronounced polymorphism of the neutrophiles was conspicuous. Blutplättchen were few in proportion. Gastric achylia completed the typical picture of pernicious anæmia. The usual therapeutic procedures were adopted, without any favourable result; the general condition grew worse, with extreme œdema of the legs, and ascites, somnolence, and a fall of the erythrocyte count to 750,000. In this state of apparently hopeless prognostic outlook Finsterer carried out the splenectomy on March 20th. The operaton was followed by rapid improvement of all the symptoms. The icterus had completely disappeared within ten days, the urine became pale and copious, the œdematous fluid was reabsorbed, and at the end of five weeks after the operation the patient was able to go about again. There was a profusion of supply of new normoblasts, displaying an active erythropoiesis; and this progress continued with but slight oscillations, till at the end of eleven weeks the condition of the blood had nearly reached the normal standard. It was, on May 29th: Erythrocytes, 4,052,000; hæmoglobin, 83 per cent.; colour index, 1. At the same time the number of abnormally large erythrocytes had conspicuously diminished; while the cells presenting a granulo-filamentous structure are only found singly here and there. The leucocyte-forming function of the bone marrow received a stimulating stroke, as it were, by the removal of the spleen, which seemed to arouse it from a torpor, with the result that the persistent leucopenia which had previously existed was transmuted, under the influence of bronchitis and decubitus, into a hyperleucocytosis (15,000 leucocytes). The proportion of blutplättchen has simultaneously risen to a standard far above the normal. The gastric achylia has remained unchanged up to the present; nevertheless the nutritive processes are unimpaired, the increase of weight has already reached several kilogrammes, and the general prospect of the convalescent seems to exclude the idea of pernicious anæmia. The extirpated spleen was found to weigh 500 grammes. There was no perisplenetic capsular thickening, and no marked increase of connective tissue was shown on histological examination. The most striking feature of the organ was the extreme hyperæmia. The lymph follicles were normal: myeloid cell elements abounded in the pulp, of which a very large number were eosinophile. The abundance of pigment is also specially notable, in form of coarse granules and rods, which are found almost exclusively within the cells, and bears full testimony to the previous intensity of the blood destruction. Satisfactory proof of the iron reaction has not hitherto proved demonstrable as regards those cells. Whether the case is to be regarded as one of actual cure, or an instance of remission of symptoms due to splenectomy, is a question which can be decided by the sequel only.

The same physician also showed a patient, æt. 18, who was affected with

SPLENOMEGALY AND ICTERUS.

His father had died of progressive paralysis; there was a brother who was healthy; there was no family record of icterus. Ever since he was two years old this youth had had enlargement of the spleen; there had been recurring attacks of icterus, of which the first was in his twelfth year, and lasted two months. There had been no marked general disturbance of the system with it, excepting pronounced cutaneous irritation. About a year later there was another attack, which lasted three months. Some years later again there was some slight jaundice, which had but a brief duration. The present attack had lasted five months. Of subjective symptoms, there were but a slight cutaneous irritation and hemeralopia. Independently of the attacks of jaundice, the patient had for the past six years suffered from, approximately, annual attacks of acute pain in the neighbourhood of the right kidney, which did not radiate from its focus; it lasted for about eight days, and ended with alvine evacuations of fæces and gas. The urine was unaffected. In his ninth year he had two attacks of hæmatemesis, without any pronounced symptoms. A year ago he had passed blood-stained urine after severe walking exercise. There had been no fever with any of these attacks. At present the patient, who displays indications of a hypoplastic constitution, is deeply affected. The lungs and heart are unaffected. The spleen is greatly enlarged (18 by 14 c.m.), easily movable, and the liver reaches two fingers' breadth below the right costal margin. There is no ascites and no alimentary galactosuria. The urine is very dark in colour and contains a great deal of biliary pigment, in addition to urobilin and bilinogen; no hæmoglobin. The alvine evacuations are normal in colour and rich in bilinogen. Optic disc is normal. Röntgen-ray examination gave no evidence of nephrolithiasis. Wassermann negative. Examination of the blood showed: Erythrocytes, 3,800,000; hæmoglobin, 80 per cent.; colour index, 1; leucocytes, 2,300. Many granulo-filamentous erythrocytes, which showed sub-vital coloration. The disc resisted normal salt solution. Donath-Landsteiner test gave negative result. Neither autolysin nor isolysin was found in the serum. The sera of six different patients were tried, but only two produced marked solution of his erythrocytes. The case probably should be described as one of splenomegaly with hæmolytic anæmia—but not referable to any of the typical categories (morbus Banti, icterus hæmolyticus congenitus oder acquisitus, hæmolysinicterus, splenomegalia hæmolytica Banti, anæmia perniciosa, etc.) in all its features.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH CORPORATION TUBERCULOSIS SCHEME.

THE scheme of the Public Health and Local Insurance Committee, outlined in this column last week, was considered at a special meeting of the Town Council on June 24th. In moving its adoption, Mr. Macpherson alluded to the arrangement which it was proposed to make with the directors of the Royal Victoria Dispensary, and stated that the Corporation could not consent to the whole care of insured and uninsured persons being taken from the Tuberculosis Officer and handed over to the Dispensary. If the negotiations fell through it might become the duty of the Corporation to create a dispensary of its own. In the discussion which followed a number of the Councillors criticised the scheme, indicating that the Medical Officer of Health ought to be the chief tuberculosis officer, and that the Victoria Dispensary should be taken over by the town. Eventually, however, the report, except that part dealing with the appointment of a consultant, was carried by 37 votes to 3. On the question of appointing Sir Robert Philip as consultant at £500 a year further discussion ensued. The Public Health Committee held that Sir Robert Philip's appointment was essential to the smooth working of the scheme, but the minority argued that, seeing that the Victoria Dispensary authorities had not so far agreed to fall in with the Council's plan, it was a mistake to appoint Sir Robert Philip, the medical chief of the Victoria Dispensary. Eventually, however, the report was adopted by 35 votes to 5 for recommittal. At present, therefore, the position of matters in relation to the treatment of tuberculosis is rather confused. On the one hand there is the fact that in Edinburgh there already exists as a voluntary agency an unrivalled institution and apparatus for the treatment of tuberculosis, which has served as the type of what such should be in all civilised countries. The position of the managers of the Victoria Institution, if we understand it aright, and also the position of the medical men who petitioned a week ago against the appointment of an assistant to the Medical Officer of Health, is that the whole clinical part of the tuberculosis scheme should remain in the hands of the Victoria Hospital authorities, with the exception, possibly, of the segregation of advanced cases at Colinton, and that the duties of the public health authorities should be limited to the sanitary aspects of the question—housing and the like. On the other hand, there is the minority in the Council, who wish to place the whole administration, clinical as well as sanitary, under the Medical Officer of Health. The report of the Public Health Committee is an attempt at a *via media*. The underlying principle is to place the general administration under the Medical Officer of Health, through the new Tuberculosis Officer, who presumably will be a clinician, and to arrange that he shall be allowed to utilise the services of the Victoria Dispensary. To facilitate co-operation, Sir Robert Philip is made consultant, so that, we presume, the new Tuberculosis Officer will have the benefit of his advice. From a letter in *The Scotsman* of June 26th, from Sir Robert Christison, Chairman of the Victoria Hospital, it would appear that the main grounds of difference between the authorities and the Corporation concern the scope of the work allotted to the Victoria Dispensary. The Council proposal is that the Directors undertake to give dispensary treatment to all sent by the Insurance Committee and the public health authorities. The Directors apparently object to such limitations as this proposal would imply, and offer to place their whole machinery at the disposal of the town, and indicate that, in view of this the appointment of a special tuberculosis officer is superfluous. The Directors also regret that the Town Council propose to discontinue utilising the Victoria Hospital as in previous years. It is hardly conceivable, we think, but that some workable arrangement will be arrived at. The Council apparently, at last thoroughly awake to the magnitude of the undertaking, wish to erect machinery of their own, and to utilise such parts of the existing machinery as may be convenient, and they wish to have everything under their own control. The Victoria Hospital authorities, however, say in effect: "We have all this worked out from the clinical side. In following the recommendations of the Astor Report, you are merely adopting a plan modelled on the scheme which already exists in the city, and which has been evolved in Edinburgh. We do not see why you should pick and choose what we are to do, taking some parts of our machinery and superseding others by your own institutions. Let us go on doing the clinical work, you looking after the administrative and sanitary parts of the problem. On these terms we shall be pleased to co-operate."

Complimentary Dinner to Dr. Alice Hutchison.

On the occasion of her return from serving with the Bulgarian Army in the recent war, Dr. Alice Hutchison was entertained to dinner by a number of her friends, including many of the medical women practising in Edinburgh and the neighbourhood. Dr. Hutchison, who has been in practice in Edinburgh for several years, and is attached to the staffs of several medical institutions, left this country in November last as one of three medical women serving with the Women's Sick and Wounded Convoy Corps. From Sofia the corps proceeded in bullock carts to Kirk Kilisse, where their headquarters was established, Dr. Hutchison acting as Principal Medical Officer. When the convoy corps returned to London in January, the three medical women remained in the service of the Bulgarian Red Cross, and had charge of half of the 4th Base Hospital. There the English women were visited by H.M. the Empress of Bulgaria. In April Dr. Hutchison and colleagues were transferred to the field hospital at Ouzoun Keupren, whence they returned to this country. This is the first occasion on which a medical woman has had full charge of a hospital in time of war. Dr. Elsie Inglis occupied the chair at the dinner.

Suffragist Outrage at St. Andrews University.

The east wing of St. Andrews University Marine Laboratory was burned by Suffragists on Saturday, June 21st, and damage to the extent of about £500 was done. As is usual in this variety of arson, the results were less effectual than might have been expected had the fire-raisers gone about their work more skilfully, and a number of valuable original drawings, representing the work of a lifetime, escaped injury. A good deal of apparatus was damaged, some original painting were burned, while the preparations actually being worked out were, of course, ruined. The usual paraphernalia of the militants was found—soft soap on windows, tins of combustible materials, and placards bearing legends. One of the latter was rather cryptic: "We need to be goaded, like oxen as we are, into a trot." Dear, muddle-headed agitators, is it you that wish the vote, or we that deny it you, who, ox-like, require the goad?

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MR. McKENNA, SIR VICTOR HORSLEY, AND THE R.S.C.Eng.

To the Editor of The Medical Press and Circular.

Sir,—I am obliged by your accurate statements in your "Notes and Comments" respecting Mr. McKenna's untrue and secret accusations against Mr. Mansell Moullin and myself made to the College of Surgeons seven weeks ago, and the facts of which I have only just succeeded in dragging into the light.

We made no complaints against any medical practitioner, as the Home Secretary informed the House of Commons, and we demand that he shall publicly state to whom we made such complaints, and when.

As regards the College and its disciplinary functions, it must not be forgotten that these archaic corporations rest their claim for continued existence and authority on these functions, and that they alleged to the Privy Council that the petition of the British Medical Association for a Charter would annul their powers if granted. Yet the answer of the College to Mr. McKenna surrenders the whole position.

It is quite clear that our medical corporations can, by the connivance of their officials, be made the vehicle of secret attacks on members of our profession, and it is for the Fellows and Members of the College of Surgeons to put this matter in such shape as to render such injustice impossible in the future.

I am, Sir yours, truly,
Victor Horsley.

June 24th, 1913.

THE ABUSE OF MERCURY.

To the Editor of The Medical Press and Circular.

Sir,—As an illustration of the extraordinary popularity of treatment by mercury in the early part of the last century referred to in Prof. Sandwith's lecture (Medical Press and Circular, June 25th, 1913). I remember that Sir Robert Christison used to say that somewhere about 1820, when he was a young man visiting St. Bartholomew's Hospital in London with a view to enlarging his professional knowledge, he and some other young men were in the House Surgeons' room discussing this very point, and he offered to bet that four out of five of the patients in the hospital were taking mercury in some shape or form, but his bet was not taken!

I am, Sir, yours truly,
ROBERT SAUNDBY.

140b Great Charles Street,
Birmingham.
June 25th, 1913.

INFANTILE MORTALITY.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—As there were several comments in your paper regarding my letter on this matter, I wish to say that I thank your correspondents for expressing their views. I still hold to my opinion that the principal cause of the high death-rate is maladministration of food. To feed a child requires a good deal of judgment (and this requires a very long experience), as nearly every child's digestive power has a law of its own, whether in a healthy state or suffering from some disease.

I am, Sir, yours truly,
THOMAS P. CODD.

78 Lr. Drumcondra Road, Dublin.
June 22nd, 1913.

A GOOD HOLIDAY FIELD.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—The problem of the best place to go for a holiday visit has often to be settled almost at the last moment by the medical man. In casting about for a desirable spot my attention has been drawn to an extremely cheap excursion organised by the Paris, Lyon and Mediterranean Railway from London to Savoy, Dauphiny and Auvergne. Tickets are issued for July 12th, August 2nd and 30th at reduced fares, which work out roughly at £4 first class and £2 10s. to £3 second for 25 days. The headquarters are: To the Savoy, Chamonix; to the Dauphiny, Grenoble; and to the Auvergne, Clermont-Ferrand. There are several routes, and the journey can be broken at the Channel ports and at Paris, at Amiens on the S.E. and C. Railway route, and at Rouen on the L.B. and S.C. route. The return journey can be made any day. Full details can be obtained from the P.L.M. Office, 170 Piccadilly, London, W.

In my own case, the chance of a visit to either one of these delightful centres, situated as they all are in the centre of most beautiful scenery and of historic associations, has helped me to solve the holiday problem out of hand. The fares are moderate, and living is inexpensive to those who know how to choose the right hotels. Enthusiasm at the prospect thus opened up is my only excuse for asking you to insert this letter.

I am, Sir, yours truly,
AN OVERWORKED PRACTITIONER.

London, N.W.
June 28th, 1913.

OBITUARY.

SIR JONATHAN HUTCHINSON.

WE deeply regret to record the death, briefly announced in our last issue, of Sir Jonathan Hutchinson, F.R.S., LL.D., F.R.C.S., which took place at his residence, The Library, Inval, Haslemere, on June 23rd, in his 85th year. The deceased, who was well termed the "grand old man of surgery," was born at Selby, Yorkshire, on July 23, 1828, the second son in the large family of Jonathan and Elizabeth Hutchinson (*neé* Massey), both originally from Lincolnshire, and members of the Society of Friends. Jonathan was educated at home, or at a day school in his native town, and was conspicuous from childhood for his studious habits; light literature of every kind was withheld from him by the wishes of his father. At 16 he left school to be apprenticed, as the custom then was, to Mr. Caleb Williams, a leading surgeon in the city of York, under whose direction he attended lectures and hospital practice at the medical school there, which was then a very small one and has long ceased to exist. In 1850, at the close of his apprenticeship, he came to London and entered as a student at St. Bartholomew's Hospital, whence he qualified as M.R.C.S. and L.S.A. in 1850. Six years later he married Miss Jane Pynsent West, a daughter of William West, F.R.S., of Leeds, after he commenced surgical practice in London, being first appointed to the Metropolitan Free Hospital. A few years later he was elected upon the staffs of the London Hospital, the Royal London Ophthalmic Hospital, and the Hospital for Diseases of the Skin, Blackfriars. Early in his professional life he took an interest in leprosy, and in 1869 he visited Norway in order to observe and study the disease in one of the places of its chief prevalence, and, having early arrived at the conviction that it was associated with the use of badly cured fish, he spared neither trouble nor expense in the endeavour to obtain conclusive evidence upon the question. His conviction on the matter was very generally received with incredulity, and, although as years went on this incredulity underwent marked diminution, Hutchinson never ceased to regret the opposition which his views had encountered, with the consequence, as he believed, that an easily attained reduction in the prevalence of the malady was delayed, and that what he regarded as the gross cruelty and injustice of the compulsory segregation of lepers was still, although only in a few places, continued. During 1899 and 1900 he visited South Africa on leprosy work, and in the following year made a tour for the same purpose in Ceylon and India, and lectured upon the subject in several medical schools. In 1906 he visited Switzerland to inquire into an outbreak of leprosy in the Rhone Valley, and in August, 1909, when already in his 82nd year, he paid a second visit to Norway in order to attend a conference upon leprosy at Bergen. In 1865 Hutchinson obtained the Astley-Cooper triennial prize of 300 guineas for his essay on "Injuries to the Head," and some years later he was elected a Fellow of the Royal Society, although he seldom took part in its proceedings. At various times he was president of nearly every medical society in London, and he presided over the third International Triennial Congress of Dermatology. At the age of 80 he was the recipient of a special vote of congratulation from the Royal College of Surgeons of England, of which he was a former President. His untiring zeal and devotion in the cause of science was preserved until a comparatively short time ago. Those who were fortunate enough to hear him deliver a discourse at the Dermatological Section at the annual meeting of the British Medical Association, held in London in 1910, will remember the zest and energy which he threw into his highly original remarks upon "Paleogenesis as illustrated in certain affections of the skin," though he was obviously far from well at the time. Perhaps the greatest monument to Sir Jonathan consists in the Polyclinic, or Medical Graduates' College, to which he gave its name and support. He was always a strong advocate of pictorial illustration as an aid to teaching, and at the Polyclinic there is a collection of pathological drawings, made and collected entirely at his own expense, which has no rival in any medical centre of the world. He has founded at Selby, in Yorkshire, where he was born, and at Haslemere, in Surrey, two museums, chiefly, but not entirely, devoted to natural history. These museums are well known and have proved most valuable. The Haslemere Museum was built, stocked, and is maintained at his sole expense, and contains some novel features. In it are stored specimens of natural history, maps, charts and historical portraits, which are so remarkable that it is felt that such an institution is worthy of a wider field.

In his published writings Sir Jonathan showed the same acumen that characterised his clinical teaching, and his "Archives of Surgery," "Illustrations of Clinical Surgery," "Clinical Lectures on Rare Diseases of the Skin," are standing monuments to his skilful insight and investigation into disease. He received the honour of knighthood in 1908, but his door-plate was never altered from "Mr. Hutchinson." So has passed a great and noble man, famous alike as surgeon, syphilologist, neurologist, dermatologist, and ophthalmalogist, and the whole medical profession will indeed mourn his loss.

MEDICAL NEWS IN BRIEF.

West London Medico-Chirurgical Society

The annual general meeting of this Society will be held on Friday, July 11th, in the College Class-room, under Devonshire Ward, West London Hospital. The chair will be taken by the President, Mr. G. P. Shuter, at 5 p.m. The general meeting will be preceded at 4.55 p.m. by a special meeting for the election of new members. After the presentation of the annual report, the financial statement, etc., the ballot for officers for next session will take place, Dr. F. S. Palmer, Physician to the West End Hospital for Diseases of the Nervous System, being nominated as President.

Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society, held a few days since, Dr. J. F. Allan in the chair, the accounts presented showed that the sickness claims were decreasing with the advent of the warmer weather. The number of claims through motor cycle and car accidents is increasing, and the severity of some of these is shown by the fact that one member at least has been on for two years, and many others of varying durations from two months downwards. Fractured arms from back fires when starting are the most frequent cause of accident.

The new business has been well up to the average, and there is a growing desire among the profession to get covered against sickness and accidents, and, as is so often the case, many members come to the Society from other companies when they find out that the Society's rates are so much lower than the others.

Taking at random three examples of claims by members it was found that although they had only paid £521 in premiums they had received over £4,790 in sickness pay during their membership.

Epsom College.

The annual general meeting of the Governors of Epsom College was held the other day at the office in Soho Square, the Treasurer, Sir Henry Morris, presiding. He was supported by Sir Francis H. Champneys, Sir William S. Church, Sir James Reid, Surg.-General Sir Lionel D. Spencer, and other Governors. The annual report stated that since the last annual general meeting H. W. Hodges had gained a classical exhibition at Hertford College, Oxford, and A. J. M. Lander had taken a similar exhibition at Sidney Sussex College, Cambridge. Last year there were over 150 members in the Officers Training Corps, of whom five passed the examination for certificate "A." At the conclusion of the meeting a vote of thanks to Sir Henry Morris for the great services which he renders to the College as Treasurer, was moved by Sir William Church, seconded by Sir James Reid, and carried.

Proposed Memorial to the late Sir Henry R. Swanzy.

A meeting will be held in the Royal College of Surgeons, Dublin, on Thursday, July 3rd, at 4 p.m., to consider what would be the most appropriate form of a memorial to the above-named eminent ophthalmic surgeon, to whose unfailing energy and public spirit Ireland mainly owes the magnificent Royal Victoria Eye and Ear Hospital which is now established in Dublin. The meeting is summoned by the Right Honourable Lorcan G. Sherlock (Lord Mayor of Dublin), the Lord Chancellor of Ireland, the Earl of Pembroke, the Earl of Meath, Lord Monck (President Royal Victoria Eye and Ear Hospital), Lord Ardilaun, Mr. W. D. Andrews, Mr. W. M. Murphy (President Chamber of Commerce), Mr. James Henry (President Incorporated Law Society), the President Royal College of Physicians, and the President Royal College of Surgeons.

Honorary degree for Sir Robert Woods.

The following is a translation of the Latin oration made by the Public Orator of Dublin University (Dr. A. C. Purser), in presenting Sir Robert Woods for the honorary degree of M.Ch. last Thursday:—

Our list closes with the name of a man known to all, admired by all, loved by us all, Sir Robert Henry Woods, who a year ago held with eminent distinction the Presidency of the Royal College of Surgeons in Ireland, and has lately received from the King the well-deserved honour of knighthood. Educated in our halls, where he graduated with first-class honours in Physics and Chemistry, he is able to use these sciences very often in the practice of his profession, and, always thinking from what I may call a physical basis, he often disdains to adopt a treatment "of common mintage, hackneyed, worn and bad," but applies new and original and most effectual methods of cure, whereby in perfectly marvellous wise are the patients made whole. Your nose is deformed, either by Nature or disease: Woods will make it quite shapely. You are deaf: Woods will restore your hearing. It may be that you are not averse from hearing your own voice, and yet your throat suffers from some malignant affection so that, poor soul, you cannot utter even a word: Woods better than anyone else will cure that tragic condition. As lately into the throat of a patient whose vocal cords had been cut out he inserted new cords—cords of brass—made by himself—you must admire his mechanical ingenuity and skill—with the result that the dumb man as by miracle spoke clearly and distinctly. Virgil alludes to such a voice as absolutely impossible when he says—

> "Nor could I, though I had a hundred tongues,
> Utterance a hundred-fold and iron voice";

but that was before Woods lived. Nowadays he might have got such a voice (which Lucretius, too, desired might have been granted him), and have

> "The types of guilt in their full number traced,
> And run through all the forms of penal woe";

and so the sixth book of the Æneid would have (good gracious!) increased a hundredfold, which consummation, however, the Fates have properly denied.

In Great Britain Woods is highly esteemed: he has been President of the Laryngological Society and Vice-President of the Laryngological Section of the British Medical Association.

> "So thus from fame to fame his glory grows."

But we here owe him a special debt of gratitude, as he has not forgotten his University, but in lectures to our medical post-graduate classes pours out to them the wealth of his learning, and inspires them with his own enthusiasm. To a man, then, of such high character, eminent distinction, ingenious originality, and gracious kindliness, our attached friend, now give your applause, and again I say give your most resounding applause.

Dublin University.

The following medical degrees were conferred by Dublin University last Thursday:—

Baccalaurei in Medicina, in Chirurgia, et in Arte Obstetricia.—Edgar Noel Bateman (antea Lic.), Hedley Boyers, Henricus Bryan Frost Dixon, Mabel Alice Dobbin, Henricus Launcelottus D'Olier Duckworth, Robertus Andreas Georgius Elliott, Guilelmus Franciscus Evans, Carolus Douglas Goodenough, David Hamilton Hadden, Ricardus Stopford, Gilbertus Halpin, Benjamin Johnson (antea Lic.), Thomas Jacobus Kelly, Radulphus Johannes Ricardus Mecredy, Guilelmus Jeremias Merrick (B.Ch. stip. cond.), Carolus Joseph O'Reilly, Johannes Thomas Simpson, Jacobus Alexander Small.

Magister in Arte Obstetricia.—Samuel Georgius Steele Haughton.

Doctores in Medicina.—Gualterus Eustace Adam, Ricardus Johannes Attridge, Eduardus Jacobus Hamilton Garstin, Johannes Franciscus Nicholson, Jacobus Noel Greene Nolan, Johannes Alfredus Guilelmus Ponton, Jacobus Harloe Christophorus Thompson, Reginaldus Tate Vaughan.

In Absentia.

Licentiatus in Medicina, in Chirurgia et in Arte Obstetricia.—David Ludovicus M'Cullough.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. A. S. G. (Aix-les-Bains).—MS. duly to hand.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The annual meeting of the above Association will take place on July 16th and 17th at the rooms of the Medical Society of London, when a presentation will be made to Dr. H. Hayes Newington, a member for forty years, President in 1889, and Treasurer since 1894. The Presidential Address will be delivered by Dr. James Chambers. Several interesting and important papers are to be read and the report of a special committee on the status of assistant medical officers and the position of psychiatry will be discussed. The proceedings will terminate with a garden party, given by the President and Mrs. Chambers, at the Priory, Roehampton.

Mr. D. Spores (Worthing).—We can hardly credit the legend that chronic bronchitis may be "completely cured by the eating of pineapple." The fruit is of considerable value as a food, and it is said to contain a digestive ferment.

THE CURABILITY OF DIABETES.

In reference to the Clinical Lecture by Prof. Robt. Saundby, published in our last week's issue, we are asked to state that the Brusson Jeune Bread, recommended by the author, is obtainable of the Therapeutic Foods Co., Bedford Chambers, Covent Garden, London.

"Hopeful" (London, E.).—The researches of Dr. W. Gordon, of Exeter, have shown abundantly the influence of rain-bearing winds upon the incidence of phthisis. We should prefer a place of a higher latitude for permanent residence than the one you mention, though with suitable drainage of the subsoil it might be tenanted for a while with safety.

AS OTHERS SEE US.

The Refereé the other day published the following:—"Panel doctoring is not all rose-leaves, neither is being panel doctored. The other day in a country district a gardener employed by a friend of mine was taken ill and could not come to work. In the afternoon my friend went to the cottage to see how the man was. He arrived just as the panel doctor was laying down the law to the sick man's mother. 'Look here,' said the doctor, 'your son's got pneumonia. He's strong and healthy, and if you feed him properly and as I say, he'll get all right. But remember another time if you want me you must send word the night before I've done this district once to-day.'

"One can quite understand the doctor's view, but's it's a little rough on the invalid. It is not everybody who can send word to the panel doctor on Thursday evening that he is going to be taken seriously ill on Friday afternoon."

Dr. S. R. (Yorks).—One of the greatest objections to the diagnosis of lymphatism or status lymphaticus is that it may become a diagnostic refuge for the destitute. Dyspnœa, stridor, inspiratory retraction of the chest, and increased dulness on percussion over the thymic region suggest the presence of the disease. In the majority of cases the thymus will be found at the autopsy regardless of the age of the subject.

Mr. H. Redding (London, E.C.).—According to the *Financial News*, a further substantial advance was made last year in the business of Virol, Limited The establishment of research laboratories and their extension to the service of the medical profession for the investigation of clinical material has met with widespread approval, and both medical men and public bodies all over the country are even now availing themselves of the service of these laboratories.

Meetings of the Societies Lectures, &c.

Thursday, July 3rd

Royal Society of Medicine (Section of Obstetrics and Gynæcology) (1 Wimpole Street, W.).—8 p.m.: Dr. H. S. Souttar: Calcified Fibroma of Ovary Obstructing Labour. Paper: Mr. Charles P. Childe: Suggestions for the Technique and Performance of Wertheim's Abdominal Panhysterectomy. 9 p.m.: Presidential Address: Dr. Amand Routh: Observations on the Toxæmias of Pregnancy and on Eugenics from the Obstetrical Standpoint.

Appointments.

Barlet, Jehan M., M.D.Brux., L.R.C.P.Lond., M.R.C.S., Anæsthetist to the French Hospital, London.

Biddle, H. G., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Hoxne District of the county of Suffolk.

Craig, J. A., F.R.C.S.Eng., Lecturer on Ophthalmology in the Queen's University of Belfast.

Dearnley, Gertrude, M.B., B.S.Lond., Clinical Assistant at the Royal Free Hospital.

Gazdar, Gertrude, M.B., B.S.Lond., Curator of the Museum at the Royal Free Hospital.

Hattersley, S. M., M.R.C.S., L.R.C.P.Lond., House Physician at the Manchester Royal Infirmary.

Magill, R., jun., M.B., B.S.Dub., Certifying Surgeon under the Factory and Workshop Acts for the Newcastle District of the county of Down.

McCartan, P., L.R.C.P. and S.Irel., Certifying Surgeon under the Factory and Workshop Acts for the Gortin District of the county of Tyrone.

Messenger-Pearson, Mrs., M.D., C.M.Canada, Clinical Assistant at the Royal Free Hospital.

Raper, H. S., M.B., Ch.B.Leeds, Lecturer in Chemical Physiology at the University of Leeds.

Seligmann, C. C., M.D.Lond., F.R.C.P.Lond., to the part-time Chair of Ethnology at the London School of Economics.

Stewart, A. G., M.D.Aberd., Medical Superintendent of the Paddington Infirmary, W.

Vacancies.

Free Eye Hospital, Southampton.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry. Applications to E. Burton, Hon. Secretary.

Three Counties Asylum, near Hitchin.—Junior Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, washing, and attendance. Applications to the Medical Superintendent.

The University of Liverpool.—Faculty of Medicine.—Walter Myers Chair of Parasitology. Salary £600 per annum. Applications to P. Hebblethwaite, M.A., Registrar.

Durham County Asylum.—Third Assistant Medical Officer. Salary £180 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Winterton, Ferryhill.

Durham County Asylum.—Fourth Assistant Medical Officer. Salary £180 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Winterton, Ferryhill.

Kent County Asylum, Chartham, near Canterbury.—Junior Assistant Medical Officer. Salary £220 per annum, with furnished apartments, lighting, heating, attendance, laundry, milk, and garden produce. Applications to Medical Superintendent.

Hampstead General and North-West London Hospital.—Resident Casualty Officer. Salary £140 per annum, with board, residence, and laundry. Applications to A. E. Thomas, Secretary, Haverstock Hill, N.W.

Horton Infirmary, Banbury.—House Surgeon. Salary £100 per annum, with board, and residence in the Infirmary. Applications to E. Lamley Fisher, Hon. Secretary, Horton Infirmary, Banbury.

Births.

Butler.—On June 24th, at 269 Goldhawk Road, London, W., the wife of J. A. Butler, M.D., of a daughter.

Derham-Reid.—On June 29th, at Auchinellan, St. Helen's Road, Bolton-le-Moors, the wife of James Derham-Reid, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Grisewood.—On June 24th, at Egremont, Cheshire, to Captain and Mrs. A. E. Grisewood, I.M.S., a son.

Verdon.—On June 24th, at Shamrock, St. Michael's Road, Dovercourt, Essex, the wife of Staff Surgeon J. Verdon, Royal Navy, of a daughter.

Marriages.

Linton—Asquith.—On June 24th, at St. James's, Piccadilly, Stanley Fox Linton, M.B., B.Sc., of Scarborough, to Mary Pemberton Asquith, younger daughter of the late T. W. Asquith, of Harperley Hall, County Durham.

Deaths.

Booth.—On June 23rd, at 30 Swan Street, Manchester, William Grounds Booth, L.R.C.P.I. and L.M.

Willett.—On June 30th, at Wyndham Croft, Turners Hill, Sussex, Alfred Willett, F.R.C.S., Consulting Surgeon to St. Bartholomew's Hospital, aged 76.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, JULY 9, 1913. No. 2.

NOTES AND COMMENTS.

Measurement in Medical Science.

AMONG the statesmen of the present generation, Mr. Arthur Balfour stands in the front rank as a philosophic thinker. At the recent opening of the new buildings of the National Physical Laboratory at Bushey, he urged that an enterprise of that kind should not be left to private benefaction. Measurement he held to be the very life-blood of all the physical sciences, in spite of the large number of things that could not be measured. Life cannot be measured, beauty cannot be measured. happiness cannot be measured. The air-waves of a great symphony can be gauged, even their energy can be estimated to the highest overtone, but we cannot measure the symphony itself. If we had a standard of happiness, politics would become a more exact science than it is at present, or than it is ever likely to become. So far as medical science is concerned the application of Mr. Balfour's views is of interest. Progress has travelled hand-in-hand with accuracy of measurement. Take the case of the microscope which has contributed so greatly to medical discovery. From the simple magnifying lens it has developed into the modern instrument which brings well-nigh inconceivably minute micro-organisms within the range of human vision. The best modern microtome, moreover, is capable of cutting with undeviating accuracy sections of tissue down to 1 μ in thickness. Instances of a similar nature abound in medicine and its cognate sciences. It may be said broadly, indeed, that ignorance of a given medical subject depends on the absence or defectiveness of methods of measurement with regard to it.

Of National Importance.

THE tissues of the human body have been investigated with ever increasing accuracy of measurement by the anatomist, the physiologist and the pathologist. An enormous mass of knowledge has accumulated regarding the physical basis of life, but for all that life itself remains elusive from our grasp. As in the case of a symphony, while it is possible to analyse and measure the forces and agencies whereby it is created, yet the abstract product we call the symphony lies beyond the compass of our human standards. Nor does it seem likely that the ultimate mystery of life will ever be within the grasp of science. On the other hand, it is unsafe to assume that anything will remain permanently outside the range of that science which has already established so vast a command over the material facts of existence. A great impulse has been given to the study of the problem of life by the fact that tissues can be grown in the laboratory apart from the living body. It is obvious that progress of this kind may have an important economic value to the community, to say nothing of their direct and indirect bearing upon the happiness of mankind. From that point of view every argument advanced by Mr. Balfour as to the desirability of national endowment applies a hundredfold to the wisdom of State aid for medical research. Much of the work now achieved by private enterprise is crippled and hampered by the need of costly apparatus and of costly upkeep and administration.

The Cure of Whooping Cough.

WHOOPING cough, in spite of the terrible havoc it plays with our juvenile population, is not—so to speak—one of the romantic diseases. The popular imagination is not readily stirred up against this prosaic malady as it is, say, against cancer, tuberculosis, small-pox, or spotted fever. For all that, whooping cough probably destroys more lives than the four diseases in question taken together. Why should not Government endow a research committee to investigate whooping cough? £57,000 has been found for a similar purpose as regards tuberculosis. To put the matter bluntly, lives saved to the State represent much the same value whether they are rescued from death by tuberculosis or any other preventable malady. There can be little reasonable doubt that some specific pathogenic organism constitutes the *fons et origo* of whooping cough, although its identity has not been so far established. News has recently come from Paris to the effect that Dr. Nicolle, one of Metchnikoff's principal collaborateurs at the Pasteur Institute, has succeeded in obtaining a curative vaccine for whooping cough. For a long time past he has been engaged in a laborious investigation on the virus of that disease. It is said that his vaccine when administered to children suffering from whooping cough leads in some cases to speedy cure, and in others to a marked mitigation of symptoms. If this be the case his discovery will be hailed with acclamation by the medical profession throughout the world. Whether this be the much wished for remedy or not it seems a simple truism to say that we in the United Kingdom should possess an official laboratory and skilled staff ready instantly to investigate a remedy which if effectual would save a vast number of lives and prove of incalculable economic value to the community.

Seaside Medical Benefit.

THE question of medical benefit of insured persons at the seaside does not seem to be advancing much nearer towards a satisfactory arrangement. It seems fairly obvious that the per caput payment is so small that it would be unfair to deprive the regular panel attendant of any portion of the amount, while it would, on the other hand, be impossible to provide the temporary seaside attendant with any adequate fee from the same source. The problem bears heavily on Southport in view of the large summer population of immigrant visitors. The medical men of that town have taken a firm stand in the matter and the Medical Committee has sent a communication to the local Insurance Committee saying that they cannot consent to the method proposed by the Commissioners for the payment of medical attendance on temporary residents out of a central pooled fund formed by deductions from the amount due to the medical practitioners on whose lists the names of these temporary residents normally appeared. The Medical Committee urge that the only fair method of dealing with this problem was by the provision of a central fund financed entirely apart from the sum now set apart for medical benefit. There the matter stands for the present.

A Princely Gift. The exact site of the London University has not yet been determined. The London County Council is anxious to have it pitched on the south side of the Thames next to the palatial building now being erected for its own municipal home. The suggested location near the British Museum was negatived because it was not large enough for the purpose. There is a fine central position available on the large plot of ground owned by the Foundling Hospital, which is to be removed into the country, but the cost of the property would probably be about half a million, and it is doubtful whether the University could pay so large a sum. The necessary funds may, of course, be forthcoming, for the springs of benevolence seem inexhaustible among wealthy philanthropists of the United Kingdom. Some six years ago some of our readers will remember an anonymous donation of £50,000 was presented to the Royal College of Surgeons of England to enable it to be incorporated with the University of London. A few days since Professor P. G. D. Thane, Dean of the Faculty of Medical Science, announced the name of their benefactor—Sir W. Gwynne Evans, who has recently had a baronetcy conferred upon him. Prince Arthur of Connaught has become President of the Fund. Professor Thane also announced that the whole of the money required for the purchase of the Flinders Petrie Egyptian collection had been raised.

LEADING ARTICLES.

THE FUTURE OF THE VOLUNTARY HOSPITAL SYSTEM.

Everyone recognises the vast importance of the part played by the voluntary hospital system in the complex social life of the United Kingdom. It is the outcome of philanthropy aided by accumulated and increasing prosperity, and from one point of view it may be regarded as a sort of acknowledgment that the division of wealth is not irreproachably just among the various classes of society. In its economic and socio-political aspects, indeed, the underlying principles of our voluntary system may be regarded from widely differing standpoints. Some advanced thinkers, for instance, do not hesitate to assert that what the philanthropic do in this way from their private benevolence should be provided by the State at the cost of the community. That contention, crude as it may seen at the first glance, has in reality been long accepted as a guiding factor in British legislation. The Poor Law of Queen Elizabeth formally acknowledged the responsibility of the State for the bodily welfare of the poorer citizens. Later developments have ended in the formation of an elaborate system of medical relief, both institutional and outdoor, with an elaborate classification and with the nucleus and, in some instances, the full fruition of applied modern medical science. Last of all has come the National Insurance Act, which has taken over the medical care of the working classes with a comprehensive thoroughness never previously attempted by the State. Altogether, it looks as if the voluntary hospital system must sooner or later be superseded by a national organisation. Professor Sir William Osler, who is always outspoken, entertains no doubt upon the subject. As President of the British Hospitals Association, he recently suggested that the days of the voluntary system were numbered. That somewhat melancholy conclusion, however, appears to have been based not so much on the effects of the Insurance Act as on the inefficiency of the hospitals themselves. The pathological arrangements of those institutions were, he affirmed, not "out-of-date" simply because they had never been in date. Defining "pathological arrangements" widely enough to include the work of a first-rate clinical laboratory, there is much to be said in support of his contention. Without such aids to modern scientific diagnosis and treatment, a voluntary hospital would find it not altogether easy to justify its claim upon the public. On the other hand, it is to be presumed that a properly organised State system would take care to provide all necessary scientific equipment. Failing such provision a State hospital system would be a snare and a delusion, and the last state of the working-class populace would be worse than the first. It is not clear whether Sir William Osler proposes to sweep away at one stroke the whole of our magnificent voluntary system. Presumably he would make an exception in the case of some of the more ancient and more efficient hospitals, such as those attached to the great medical schools and other centres of learning. It would be interesting to have his views as to the possibility of effecting some sort of compromise whereby the State would come to the aid of the voluntary medical charities and enable them to render themselves up-to-date as regards modern science. This kind of advance is merely a question of money, and it may be taken for granted that the members of the honorary medical staffs of those institutions have in a vast number of instances been woefully handicapped by the poverty of the hospitals to which they are attached. However the voluntary problem is approached it is found to end ultimately in the dominating factor of finance. Year by year medical relief grows more costly as it grows more complex and, as we believe and hope, at the same time more efficient. It is difficult to contemplate calmly the possibility of the loss of our magnificent voluntary system. One would fain hope that British statesmanship will bring about some satisfactory compromise whereby a solid and lasting union will be effected between State and voluntary efforts for the medical guardianship of the poorer population of the United Kingdom.

THE IRISH INSURANCE COMMISSION AND THE INTERIM REPORT.

The terms of reference of the Departmental Committee on Tuberculosis were "to report at an early date upon the consideration of general policy in respect of the problem of tuberculosis in the United Kingdom, in its preventive, curative, and other aspects, which should guide the Government and local bodies in making or aiding provision for the treatment of tuberculosis in sanatoria or other institutions or otherwise." The Committee performed its duties with so much ability and comprehension of the subject that its recommendations have been accepted by the official authorities as laying down the lines along which the campaign against tuberculosis was to be conducted. The Irish Insurance Commission very properly circulated the interim report to the various insurance committees in Ireland, with the suggestion that, as far as possible, its recommendations should be followed. This advice was in many areas accepted and followed with great success during the past twelve months. Within the past few weeks, however, the Irish Commissioners have changed their minds, and have declared to the Dublin County Borough Insurance Committee that it will not be permitted to carry out the recommendations of the interim report in one particular, declared in that report to be "of primary importance." The point is that dealing with the relation of general practitioners to tuberculosis schemes. The interim report declares (par. 28) "that it is of primary importance to the lasting success of any scheme for dealing with tuberculosis that it should enlist the hearty co-operation and stimulate the interest of the general practitioners of the country. Their intimate personal relations with patients and their influence in the homes of the people are forces which should be actively enlisted in the campaign against the disease as aids to securing its early recognition and methodical treatment." Again, in the "Summary of Principal Recommendations" (par. 42), it is urged "that special regard should be given to securing the co-operation of medical practitioners in the working of the schemes, *particularly in relation to the early recognition of the disease.*" In discussing the relation of insurance committees to the scheme, the Departmental report declares that among the "duties" of insurance committees will be:—"(*a*) That of securing prompt official notice wherever suspicion arises that an insured person (or possibly a dependant) is suffering from tuberculosis; (*b*) that of obtaining proper evidence as to whether such person is in fact suffering from tuberculosis." And it is further stated that these duties "must be discharged by making suitable arrangements with medical practitioners for reporting cases to the Committee, and for making the confirmatory diagnosis when required." This duty was loyally discharged by the Dublin Insurance Committee, who, acting on the advice of the Commissioners, were in the habit of paying a fee of five shillings for a preliminary report on a case of tuberculosis from the applicant's own medical attendant. This plan has worked with great success, and the Insurance Committee has dealt with a very large number of cases of tuberculosis, probably more in proportion than any committee in the Kingdom. The Commissioners, however, in a recent letter to the Insurance Committee, have declared that after July 1st, the Committee cannot pay these fees out of its funds, but that they must be paid, if at all, by the applicants themselves. We do not wish to suggest the motives which have led the Irish Commissioners to treat with contempt the interim report which one of them had signed. We view with the deepest regret the injury to the administration of the sanatorium benefit which is bound to follow. Up to the present, the working of the benefit has had the cordial co-operation of the medical profession of Dublin, general practitioners and hospital physicians and surgeons. The seed of dissension has been deliberately and wantonly sown by the Commissioners.

CURRENT TOPICS.

The Annual Election at the Royal College of Surgeons, England.

The annual election of members of the council of the Royal College of Surgeons, England, took place on Thursday last, July 3rd. It was an eventful contest, owing to the unusual number of vacancies to be filled, namely, four. These were due to the retirement in rotation of Mr. Edmund Owen and Mr. Golding Bird, who did not seek re-election—to the resignation of Mr. Bruce Clarke, who has left London, and to the death last year of Mr. Clinton Dent. For these vacancies there were seven candidates, namely, Mr. Ernest Lane (St. Mary's), Mr. J. H. Waring (St. Bartholomew's), Mr. L. A. Dunn (Guy's), Mr. Jonathan Hutchinson (London), Mr. W. G. Spencer (Westminster), and Mr. H. B. Robinson (St. Thomas'). Save for the fact that Sir R. T. Godlee occupies the presidential chair, there would have been a fifth vacancy, inasmuch as his term of office expired in the current year. At the close of the poll the President declared the first four named above to have been duly elected members of the council, the first two for the full term of eight years, the two latter as substitute members for the vacancies created by the resignation of Mr. Bruce Clarke, and the death of Mr. Dent. The substitute member for Mr. Bruce Clarke will be required by the rules to retire in 1915.

while Mr. Dent having been re-elected in 1911, his term would not have expired until 1919. It is interesting to note the strenuous rally of the large Metropolitan medical schools in favour of their representatives. Mr. Lane takes the place of his colleague, Mr. Owen, at St. Mary's Hospital, Mr. Waring, of Mr. Bruce Clarke, at St. Bartholomew's, Mr. Dunn, of Mr. Golding Bird, at Guy's. Thus the proportional representation of these schools on the council is still maintained. Furthermore, it is noticeable that no provincial fellow competed at this election, the reason probably being that the contest did not involve a change in the provincial representation—limited enough as this is. Out of the whole number of twenty-four members, of which the council is composed, only three members represent the medical schools of the provinces.

Antidote Slips.

Some of the large drug houses put little labels on the containers of their poisonous goods which suggest a suitable antidote in cases of accidental consumption of the contents. The idea is worthy of extension, as most people's ideas of first aid in such circumstances are rather vague. Care should be taken that the antidote is easily obtainable in the average home and is called by its own familiar name. Some idea of the quantity of the antidote should be given or we shall find about a pint of lime water administered in the hope of neutralising anything up to an ounce of, say, oxalic acid, which is absurd. There are not many grounds for opposing these labels. The experimental suicide might be tempted to poison himself more readily if he thought he had an antidote at hand to recall his spirit from the vasty deep in case of an eleventh hour repentance; but that would not often happen. One of the best antidotes for carbolic acid is whiskey—although it is not given in the majority of text books—and there might be an increase in the alleged consumption of the former for the antidote's sake. It happened in a Dublin hospital that after a man had three bottles of "John Jameson" administered free gratis and for nothing, there followed an epidemic of poisoning with imaginary phenol. Apart from such trifles, the labelling of every poisonous product with some simple treatment in case of accident would be well worth the little trouble involved.

Hodie Vacandi.

The warm weather has brought out the mosquitoes—and in obedience to the inexorable laws of supply and demand there now appears in large numbers the mosquitoes' prey—the holiday-maker. Now the holiday-maker is quite different from the man who is taking a holiday. The latter is an uninteresting person who goes where he wants to and does what he likes. The former suffers on principle. He is obeying as a duty the Laws of Health, as his kind understand them. They say—"Go to a place by the silvery sea where the greatest number of human beings is compressed into the smallest area and there do all the things you never have done and leave undone all the things you usually do." It is quite true, nevertheless, that at the ordinary pleasure resort we see many happy faces exuberant with health and *joie de vivre*. Not everyone is taking his pleasures sadly; some seem even glad to be alive—and we may be led to think that the jaded city worker knows what he is doing and is really getting health and strength by the application of his own peculiar principles. But we are wrong. The glad eyes and Thornton-Pickard smiles we see are not the jetsam of the cheap excursion. The visitor indeed is sad and it is the aurivorous native who wears the smile of happy villainy. Holidays are good—for the man who snares the golden tripper.

Experiences and Views of a Panel Doctor.

A recent East London inquest on a journeyman baker, aged 38, suggests some serious reflections. The young man was insured, and the panel doctor in attendance filled in the weekly certificate, giving rheumatism as the cause of the disease. Shortly before the patient's death another medical man was called in, and he stated in evidence that he at once recognised the disease from which the deceased was suffering as acute tuberculosis of the lungs. On the other hand, the medical man in attendance stated that he had notified the Medical Officer that the disease was tubercular, but at the same time he admitted he had taken no steps to get the patient into a sanatorium. The relatives of the deceased declared that the doctor said panel patients were a great nuisance, and he got only three-halfpence a week from the Prudential. It is difficult to believe any responsible medical man would have expressed the views as to the nature of a medical certificate attributed to the doctor in question by the *Daily Express*. "When I first saw the man he spoke of chronic rheumatism. People say anything to get a certificate. The mere fact of something being on the certificate—which, I may remind you, is not a medical report—does not mean that he has got that complaint." The Coroner, himself a medical man with every sympathy for members of his profession, animadverted severely on the conduct of the medical man who after attending deceased for months certified him as suffering from rheumatism. "There can be no doubt," he said, "that if the man had been properly examined and his complaint diagnosed, it would have given him a chance to get better." The jury found a verdict of death from natural causes, and added a rider of censure upon the doctor for the language he used to the wife of deceased. The fact, elicited at the inquiry, that the medical man concerned had some 2,000 patients on his panel affords no excuse for neglect of that work which has been contracted for in precise terms with the Government. Nor is the medical certificate a document that any man can with impunity venture to deal with at random or otherwise mishandle.

International Congress for Diseases of Occupation.

The third International Congress for Diseases of Occupation will take place at Vienna in September, 1914. The first meeting took place at Milan in 1906, and the second at Brussels in 1910. There are a number of sectional subjects, such as, for instance, the physiology and pathology of fatigue; work in hot and damp air; anthrax; pneumoconioses; electrical injuries; industrial poisons; injuries of hearing, and so on. Many papers have been already promised. The member's fee is 25 crowns (25 francs), and full information can be obtained from the General Secretary, Dr. Ludwig Teleky, Vienna, IX., Türkenstrasse 23. The President of the Congress is Professor Francis Von Haberler, Councillor of the Austrian Ministry, Referee for sanitary matters to the Minister of the Interior.

Ferments and the Wash-Tub.

Scientific discoveries are of little practical use unless they can be utilised in the small affairs of everyday life. The scientist seldom shines in his domestic circle, if, indeed, he be ever found within its circumference, and he is certainly no hero to his laundrywoman. Chemical stains, dyes, and organic substances of every description have to be extracted by hook or by crook from his handkerchiefs in the weekly wash. He may think to sterilise them first before sending them to the laundry, or direct this precaution to be taken, so that the mild imprecations of our lady lavatrix mingle harmlessly with the steam and go unrecorded. Many medical textbooks give lists of the various morbid affections to which washerwomen are particularly prone, such as varicose veins, bronchitis, eczema, etc. Anything, therefore, that will lighten their labours is to be hailed with satisfaction. Those soaps which need comparatively little friction are used in preference to older varieties, while the use of diastase has resulted in the easy extraction of the old starch from soiled linen. So ecstatic lavage follows diastatic action in the wash-tub.

The Etherington Smith Memorial.

Sir Anthony A. Bowlby, on behalf of the Memorial Committee, has written to say that the subscriptions which have been received and promised for the Etherington Smith Memorial, including the sum collected by the Leander Club, amount to a little over £1,200. This sum will probably be sufficient to carry out the structural alterations required to provide the memorial, which is to take the form of special sick quarters for the medical and resident staff, but will not supply any permanent endowment. The signatories desire to thank those of our readers who have already subscribed and to make an earnest appeal to all who knew Etherington Smith, and have not yet done so, to subscribe as liberally as they can to this fund. Subscriptions may be sent to the Hon. Treasurer, Dr. T. W. Shore, Dean's Office, St. Bartholomew's Hospital, E.C.

PERSONAL.

H.M. the King has given Capt. R. G. Anderson, R.A.M.C., permission to accept and wear the decoration of the Fourth Class of the Imperial Ottoman Order of the Medjidieh, which has been conferred upon him by the Khedive of Egypt in recognition of valuable services rendered by him.

Dr. H. Leith Murray has been appointed Hon. Assistant Surgeon to the Hospital for Women, Liverpool.

Mr. Bertram A. Lloyd, M.B., B.S.Lond., F.R.C.S., has been appointed Surgeon to Out-Patients at the Queen's Hospital, Birmingham.

Dr. B. T. Edye, M.B., C.M.Sydney, has been appointed Demonstrator in Pathology in the Medical School of the University of Sydney.

Dr. John Lumb, Assistant Medical Officer and Bacteriologist at the Eastern Hospital, London, has been appointed Assistant Medical Officer of Health at Warrington.

Capt. A. J. V. Betts, I.M.S., has been appointed Resident Surgeon to St. George's Hospital, Bombay, and Professor of Materia Medica at the Grant Medical College, Bombay.

Among the recipients of the Honorary Degree of LL.D. of the University of Edinburgh, on July 4th, were Emeritus Professor Greenfield, and Dr. John Stewart, of Nova Scotia.

On Wednesday, July 23, at 12.30 p.m., Professor George R. Murray, M.D., F.R.C.P., will deliver an address on medicine at the Brighton meeting of the British Medical Association.

An oil portrait of Dr. J. Magee Finny, a past-President of the Royal College of Physicians in Ireland, has been presented to the College by his nephew, Dr. W. E. St. Lawrence Finny.

Dr. James Metcalfe, M.D.Brux., L.R.C.P., and S.Edin., has been appointed Physician in Charge of the X-Ray and Electrical Department at the Prince of Wales's General Hospital, Tottenham, N.

Mr. Alfred Lees Halkyard, of Leicester, retired physician and surgeon, who died on May 15th last, aged 57 years, left estate of the gross value of £35,190, of which the net personalty has been sworn at £31,091.

Major T. C. H. Leicester, I.M.S., has been appointed to officiate as Professor of Midwifery and Gynæcology at the Government Medical College, Calcutta, during the absence on leave of Lieut.-Col. C. R. M. Green.

On Thursday, July 24th, at Brighton, at 12.30 p.m., Ainslie Hollis, M.A., M.D., F.R.C.P., will be inducted to the presidential chair of the British Medical Association. While at 8.30 p.m. he will deliver his address in the Brighton Pavilion.

Sir Alfred Pearce Gould has sent £1,000 to the Middlesex Hospital with a request that it should be expended on the purchase of radium, which is to be used for the treatment of patients, especially those who are suffering from malignant disease.

The New Toronto General Hospital, in affiliation with the Provincial University, was officially opened on the 19th ult. by Sir John Gibson, Lieutenant-Governor, and Sir James Whitney, the Premier of Ontario.

The usual breakfast will be given by the National Temperance League at the annual meetings of the British Medical Association at Brighton, under the presidency of Dr. William Ainslie Hollis, in the Banqueting Hall of the Royal Pavilion, on Thursday, July 24th.

The Humane Society has forwarded to Dr. Bark, of Rodney-street, Liverpool, an illuminated resolution of thanks for the services he rendered to the three men asphyxiated by gas on the wrecked Ulstermore. Dr. Bark went in a small boat to the lightship and rendered aid to the three unfortunate men, two of whom recovered.

On Thursday, July 24th, at Brighton, at 12.30 p.m., the address on surgery will be delivered by Sir Berkeley Moynihan, M.S., F.R.C.S., and on Friday, July 25th, at 8 p.m., a popular lecture, entitled "Some Wonders of Animal and Plant Life in Pond and Pool," will be delivered by Edmund Johnson Spitta, L.R.C.P.Lond., and illustrated by a cinematograph.

Sir Alexander Ogston, K.C.V.O., M.D., Consulting Surgeon to the Aberdeen Royal Infirmary, has consented to accept the unanimous nomination of the Aberdeen Branch, which has been accepted by the Council of the British Medical Association, to become President-Elect of the Association for the year 1913-14. Such a choice cannot fail to give profound satisfaction, not only to members of that Branch, but also to the whole medical profession.

CLINICAL LECTURE
ON
THE SURGICAL TREATMENT OF EPILEPSY.

By Prof. Dr. O. KUKULA,

Prague.

[Specially Reported for this Journal.]

Gentlemen,—To-day I am about to call your attention to the surgical treatment of epilepsy, a subject that still retains the same practical interest which it did for us 22 years ago, when we began to approach it more nearly. This field had been backward in cultivation compared with other surgical domains—chiefly from the fact that a solid basis was not available for a surgical claim. There was, therefore, no reason for surprise that the surgeon did not promptly decide thereon, as the approach was beset with danger and the result confessedly insecure. It is only quite recently that, at least in most cases, a pathological substratum has come to be defined as the causal factor in epilepsy, and the surgical procedure could be based scientifically thereon as in other clinical conditions. For such advances we are indebted, on the one hand to the advances of neurology, and on the other to the development of surgery.

According to the explanation generally received at present, epilepsy is a chronic disease of the central nervous system; which is characterised, on one aspect, by convulsive phenomena of toxic origin; and, on the other, by nervous phenomena: prodromal, simultaneous, and subsequent. The most important modification of the nervous system is the conspicuous increase of irritability, the precise cause of which remains still unknown; and we, accordingly, refer to it here as an *epileptic* or *spasmophile* modification of the nervous system. Possibly, we have here to deal with pathological changes on a molecular scale; possibly with functional lesions which are called into existence by pathological products of metabolism (Binswanger).

With regard to the ætiology, neurologists tell us that we must distinguish between the disposition to genesis of epileptic phenomena, the development of epileptic changes, and the original causes which induced the epileptic attack.

By *predisposition* we understand an inclination to epileptic changes in the nerve-tissues. The principal factor in the origin of such predisposition is *heredity;* it produces an inclination to commencement of epileptic changes, which, according to Turner's researches, present themselves in form of various minute anomalies of the nerve-tissues; and, according to Ranke, in the case of syphilitics, manifest their presence by a peculiar flexibility of the vessels transmitted from the parents (alcoholics, luetics) to their offspring. In the case of inherited predisposition, the development of epileptic changes of tissue may be called into activity by various external causes; such as: local injury, infectious disease, psychic affections, anomalies of metabolism; auto-intoxication, &c. Among these, *trauma* is a very important factor. No doubt of the existence of the causative connection between trauma and epileptic change can be admitted at present date. Numerous and reliable observations have made this quite evident. Thus: (*a*) those cases, more especially, in which the epileptic symptoms develop after recent injury. So far as our present evidence goes to show, the epileptic phenomena which follow injury are of two classes: one of these is of the Jacksonian type; the other is that of diffuse or generalised epileptic symptoms. The first of these are due to the local effect of the injury to the cortex cerebri, and are definitely relieved by removal of the depressed fragments, or the extravasated blood; or to the pressure which these had kept up on the brain as a whole; thus also in cases of concussion of the brain, where the symptoms subside on the successful removal of the consequences of such concussion. (*b*) Then we have a group of cases, in which epileptic attacks persist for a shorter or longer period after the date of the injury; as the result either of the local effect of the traumatic lesion on the cerebral cortex, or of the general effect on the brain. In the first of these divisions, we have the occurrence of epileptic seizures of the Jacksonian type; in the second, we have the development of diffuse epilepsy.

The first of these groups is by far the most instructive with regard to the mechanism and mode of development of epileptic changes. We usually have to reckon with a traumatic lesion of the skull; in the course of a number of years, or perhaps much earlier, cramps of certain groups of muscles begin to appear, which in succeeding attacks effect larger groups; and so on, till we have the development of complete epileptic seizures—and, eventually, even some implication of the intellectual powers. So long as the attacks are limited to individual muscle-groups, the intellect is unlikely to become seriously clouded, but the more extended the epileptic phenomena become, the more do psychopathic alterations manifest themselves; and, in the very severe cases, not merely do we meet with typical pareses, and paralyses of the muscle-groups affected, but we find the development of idiocy, which is notably a phenomenon of frequent occurrence in connection with genuine epilepsy.

In a large proportion of cases, the muscle-groups affected in the attacks of Jacksonian epilepsy, or the aura by which these are preceded, are those associated with the cortical centre subjacent to the scar or depression of the skull produced by the original injury; in a good many others, however, the results of the trauma are manifested in areas of the cortex at greater or less distances from the original centre of which the irritation led to the origin of the symptoms.

When we operate in those cases, we find, as a rule, conspicuous pathological alterations at the seat of the trauma; either an impression in the cortex, or sharply projecting fragment of bone; or œdema of the arachnoid which often envelops the cortex completely; or a cyst, or a porencephaly; or, in fine, encephalitic foci of inflammatory or necrotic processes, of which the extirpation is followed by permanent disappearance of the epileptic attacks.

In connection with these observations, three facts are noteworthy—

(*a*) The resulting epilepsy may develop a number of years after the original injury; a fact which significantly indicates that with a congenital predisposition to epileptic alterations a longer interval may be necessary.

(*b*) The gradual extension of epileptic spasm to the neighbouring muscle-groups; this clearly teaches us that the epileptic alterations, after first engaging a limited cortical area, extend circumferentially; till a diffuse epileptic structural change of the nerve-tissues has become established.

(*c*) The almost constant occurrence of anatomico-pathological changes indicate the development of inflammatory processes in the seat of the trauma, and extending to the adjacent bones, meninges, and brain substance; cysts, œdematous swellings of the arachnoid, endostoses, hyperostoses, encephalitic foci, &c.

Tillmann demonstrated the existence of these changes in 19 of 20 cases observed by himself, and I did in six cases out of seven of my own. In 267 cases of traumatic (circumscribed and diffuse, generalised) epilepsy, collected by Tillmann from the literature of the subject, 233 (87 per cent.) presented specimens of those various changes; the revelations of operative procedure were negative in 35 (13 per cent.) cases only. But one cannot help thinking that many of these cases originated at an earlier period, at a time when the sources were not sought so much for in the brain. Accordingly, we do not commit ourselves to a mistaken opinion in stating that in the great majority of cases of traumatic epilepsy there may be found pathological changes, for the most part of chronic inflammatory nature; which stand in causal relationship with the structural alterations promoted by the occurrence of the original injury.

To the demonstration of this causal nexus luminous evidence has been contributed both by experimental research on animals and by the results of operative surgery. In the case of animals, epilepsy supervenes only when operations on the brain are followed by inflammatory processes; it never occurs when the operation wound heals by first intention (Tillmann). Then, with regard to the results of surgical procedure, it is an old experience that the operative procedures in cases of traumatic epilepsy lead to the most successful results in those cases in which pathological changes are found, and their products removed; while, in those in which the findings in the skull and brain are negative, they frequently produce but little improvement.

The clinical experiences of traumatic epilepsy which have hitherto been collected, and, in no less degree, the experimental results, lead to this conclusion; the gradual genesis and expansion of epilepsy, which coincide with the development of the chronic inflammatory changes in the skull and brain, on the one part, and the artificial results of operative procedure and experimental research, on the other, fully support the view that the various pathological findings in traumatic epilepsy stand in cause-and-effect relationship with the post-traumatic epileptic phenomena. Those changes develop in the cortical centres originally, or spread thereunto from a distant seat of injury, by successive steps; and, finally, under conditions still inexplicable, the first seizure takes place, by the occurrence of which the previously latent epileptic changes become manifest.

By this determination of a causal relationship between the pathological findings and the post-traumatic alterations, the surgical treatment of traumatic epilepsy becomes established on a scientific basis. By the same influence, traumatic epilepsy comes to be ranged in the group of so-called *symptomatic*, or secondary, or *organic epilepsy;* in which we had already included, and for corresponding reasons, those cases of epilepsy dependent on various pathological processes: new growths, granulation tumours, cysts, &c. Thus have the clinical symptoms, the pathological substratum, and the artificial results of operative interference, all combined in their respective departments to place the surgical therapy of this disease on a sound basis; and all the more so as the results contrast so forcibly with the disappointing ones obtained by medicinal agents in the treatment of so many forms of genuine epilepsy.

On the other hand, we have also to consider another large class of cases of epilepsy; those which are known as *idiopathic* or *genuine.* In respect to these, the dogma has hitherto held good, that epileptic phenomena are not genetically based upon pathological changes in the nerve-tissues and their environment. Many authorities would, indeed, claim a pathological substratum in cases of genuine epilepsy, but the structural alterations discovered were so insignificant and so variable that no certain conclusion could be drawn regarding their association with epilepsy. Nevertheless, the endeavours have continued to be still further extended, with the object of establishing the association of cause and effect in the alterations found in cases of "genuine" epilepsy. In this direction they are led by the clinical phenomena, which quite significantly indicate the fact that there exists no fundamental distinction between the clinical features of *symptomatic* and of *genuine* epilepsy.

With regard to symptomatic epilepsy, it is characteristic of the Jacksonian type of cortical epilepsy that the various post-epileptic alterations in the sensory and motorial zones tend to assume a more or less chronic character. Those changes, as a rule, are localised in the areas which determine the onset of the attacks in typical cases; and a sensory or motor aura often emanates from the locality. At the beginning of the development of symptomatic epilepsy, the sensorium appears to be unaltered; consciousness, as a rule, comes to be affected only at a later stage; when the convulsions have extended to a greater or less portion of the trunk, or the epileptic attacks have come to be universally diffused throughout the muscular system. Psychopathic post-epileptic alterations are decidedly rare of occurrence in cases of organic epilepsy.

Accordingly, in cases of *genuine* epilepsy we are presented with the following typical picture: after a prodromal aura, or without the occurrence of such, there is loss of consciousness and muscular spasm; which may be universally diffused from the outset, or be localised at first, and then extend, without any regularity of procedure, to other muscle-groups; and rapidly culminate in generalised convulsions. Permanent post-epileptic alterations of the sensory and motor areas do not develop; or at most we find but moderate and very transitory symptoms of exhaustion (*Erschöpfungssymptome* of Binswanger). A solitary exception must be admitted as regards *aphasia,* which appears pretty frequently, and persists a considerable time after the attacks in a good many cases. And not less frequent are various psychopathic symptoms, which successively develop in cases of *genuine* epilepsy. Many authorities, indeed, regard these symptoms, and also aphasia, as important indications of the presence of *genuine* epilepsy, as distinguished from the *symptomatic* variety.

Besides those typical forms of *genuine* and *organic* epilepsy, we have to deal with the very frequent occurrence of transitional varieties, which represent intermediate stages between the two great group divisions. Thus it is by no means rare to find in cases of *symptomatic* epilepsy that the circumscribed convulsions of an attack proceed to become general. In cases of long standing, psychopathic phenomena appear too, and not infrequently, even passing into idiocy; and we find, indeed, that the aphasia which is by many regarded as a typical symptom of *genuine* epilepsy also occurs in cases of the *organic* group; a significant instance of this will be hereafter referred to. On the other hand, we not infrequently observe cases of *genuine* epilepsy which lean strongly towards the Jacksonian type of symptoms; beginning always, as in *organic* cases, with certain muscle-groups, and then proceeding to the neighbouring ones; then again, permanent post-epileptic changes are not infrequent; they are usually, indeed, but slight, and may be easily overlooked when not specially sought for; but it is not rare to meet with significant alterations of hemiplegic nature, such as: muscular atrophy, dissimilar innervation of the two sides of the tongue, imperfect attempt at mimicry, &c.

The typical forms of one variety of epilepsy, and also those of the transitional specimens, give significant indications of the fact that from the symptomatic standpoint no principal dividing line can be drawn between the two great types of epilepsy; and that the distinctions which display themselves in the typical forms are but the expression of the more or less advanced epileptic changes of structure, up to the date of onset of the attack. As regards the *organic* form, the association is with a pathological substratum; accordingly it is but logical, when we grant the existence of a pathological substratum in the *idiopathic* type, to admit that we are not fully acquainted with its limits. This suggestion finds fairly abundant corroboration, not only in the ætiological influences, but also in the anatomico-pathological alterations found in cases of idiopathic epilepsy. Apart from the fact that so many cases of apparently *genuine* epilepsy have proved to be of *organic* origin (tumour, abscess), either in the course of their progress or by the revelations of the autopsy, it is definitely recognised now that a tumour may in many cases be a cause of the "genuine" type of attack. Friedrich found traces of injury on the shaven heads of more than half the cases of epilepsy he met with; and he believes, accordingly, that the trauma is the originating force in the genesis of epileptic alterations much more frequently than has hitherto been believed. It is often a matter of an accidental injury in early life, which is remembered by neither parents nor patient; or an accident of parturition; &c. Other authorities (Pierre-Marie, Freud, Zappert, Krausen, &c.) suggest that another ætiological factor which has often been overlooked is the occurrence of *acute encephalitis* in childhood. Apparently, cases of epilepsy which supervene during childhood after acute infectious diseases (typhus, scarlatina), are the result of abortive attacks of acute encephalitis; which had successfully escaped the notice of the physician as well as of the parents. Further evidence of the connection between encephalitis and epilepsy is afforded by the records of the occurrence of acute encephalitis in children—according to Weil, 75 per cent. of his 35 cases of encephalitis were followed by epilepsy—and, on the other hand, we have the occurrence of slight paresis; and the atrophy of the muscles of the limbs, and of the muscles of mimetic expression, to which I have already referred. According to Weil, too, syphilis, hydrocephalus, and diffuse hyperostosis of the cranial bones are among the ætiological factors accountable for the appearance of epilepsy.

In view of the fact that such factors are to be estimated in the production of epilepsy, we have obviously to recognise an ætiological connection between the *organic* and *idiopathic* types of the affection. But unfortunately the anatomical findings are not yet so numerous as to enable me to establish clearly the identity of the varieties of epilepsy—either from the clinical, ætiological, or pathological standpoint. Numerous writers (*e.g.*, Chaslin, Alzheimer, Rendori, &c.) have sufficiently studied the subject of *genuine* epilepsy. According to their results, structural changes appear in more than half of the cases; some distinctly macroscopic, and others histological only.

Apart from the discovery of cysts in many cases of the Jacksonian type, which unquestionably belonged to the group of *organic* epilepsy, there have been very frequently found in those of the generalised, *genuine* form of epilepsy: œdema; thickening or cicatrisation of the cerebral meninges; overgrowths of the latter; and, in rare cases, porencephaly; while in a good many instances there were developmental anomalies of the skull or brain, or both; asymmetry of the convolutions, and of the base of the skull; or microgyria.

Histologically recognisable have been endarteritic and arteriosclerotic changes, sometimes diffuse, and enveloping sclerotic processes of the grey and white matter of the brain; pachymeningitis; leptomeningitis; encephalitic foci; &c. The sclerotic areas involved appear to have been variously distributed in the grey matter; in many cases, the foci of sclerosis displayed changes of a trophic character; and, in others, of hypertrophic, or tuberose. The observations of Alzheimer are interesting; he found at intervals a distinct gliosis spreading inwards, while outside were alterations of evidently chronic character; and, in a case of *status epilepticus,* he discovered acute regressive changes in the neuroglia cells, destruction of axis-cylinder fibres, &c.

These findings furnish evidence in favour of the view that cases of ordinary, as well as those of *organic* epilepsy have an anatomical basis; and that this disease may, accordingly, be regarded as a chronic disease of the brain, accompanied by anatomical changes of varying quality and extent (Weber). And, although it cannot be said that the conditions found up to the present have been so constant as to dissipate doubts regarding this view, there is good ground for hope that the histological findings of the future will, in combination with clinical experience and pathological observation, explain the various phenomena of genuine epilepsy.

Those acquisitions to our knowledge are undoubtedly of great value to practical surgery, for they give the practitioner a scientific basis for his surgical procedure; the reliability of the leadership cannot yet, however, be regarded as finally established. Accordingly, we must for the present continue to make, from the standpoint of surgical therapeusis, a distinction between the *organic* (*symptomatic*) cases of epilepsy, in which definite, macroscopically visible, structural causes can be demonstrated; and those in which the microscopic anatomical alterations are so minute that they have no determining influence on surgical procedure, and are still referred to as *genuine* (*idiopathic*). In the former class of cases, as already indicated, there exists a scientific foundation for surgical interference; while, in the latter group, surgical procedure must be based, partly on physiological acquisition of new facts, and partly on theoretical hypothesis and assumption.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Sydney Stephenson, S.O. Oxon. Subject: "The Treatment of Glaucoma, with Particular Reference to the Newer Operations."*

ORIGINAL PAPERS.

THE PATHOLOGY AND TREATMENT OF HALLUX VALGUS.

By A. S. BLUNDELL BANKART, M.Ch., F.R.C.S.,
Surgeon to the Royal National Orthopædic Hospital, &c.

HALLUX VALGUS, or outward deviation of the great toe at the metatarso-phalangeal joint is a common deformity the true pathology of which is not generally recognised. It is commonly attributed to the use of narrow or pointed boots and shoes and is supposed to be the direct result of pressure against the inner side of the toe. Such ill-fitting footwear is worn by a great many persons and this explanation appears at first sight so simple and obvious that few have questioned it.

But there are many cases which are difficult or impossible to explain on the "boot theory."

Hallux valgus is said to have occurred in individuals who have never worn boots or shoes, and it certainly does occur frequently in those whose boots are broad and give ample room for the toes. It is easy to see how a narrow pointed boot may push the great toe outwards to a certain extent but why should the deformity increase when the toe has passed the line of the inner border of the boot? How can any boot push the toe right across until it lies almost at right-angles to the long axis of the foot, as it may do in a severe case of the deformity? Again, there are cases in which hallux valgus is present on one side only, the other great toe being in its normal position; and at least one case has been recorded in which there was hallux valgus on one side and hallux varus, or inward deviation of the great toe, on the other. Such cases cannot be explained on the theory of boot-pressure.

Indeed, the part played by boots and shoes in hallux valgus has been much exaggerated. In the vast majority of cases the deformity has little to do directly with the footwear, but is the direct result of flat-foot.

Hallux valgus is almost invariably accompanied by flat-foot. Indeed, most of the cases of slight or moderate deformity apply for treatment of the foot, and not on account of the toe; and where the chief complaint is of the toe, flat-foot, if looked for, can be found in nearly every case—usually it is well-marked. So constant is this association, that hallux valgus is commonly given as one of the causes of flat-foot, whereas the converse is the truth—hallux valgus is the result and not the cause of flat-foot.

It is obvious that when a curve or an arch is straightened out, the distance between its extremities is increased. So in flat-foot, when the arch of the foot is flattened out, the distance between its points of support is increased—in other words, the foot is lengthened on its inner side. One result of this is that a great tension is thrown upon all those muscles whose points of origin and insertion are moved further apart. Pain in the calf and up the front of the leg in many cases bears witness to this tension on the muscles whose tendons pass into the foot on the inner side.

Now, the proximal phalanx of the great toe articulates by a shallow concavity with the large rounded head of the first metatarsal bone. The articular surface of the metatarsal is more extensive in all directions than that of the phalanx, so as to allow free movement of the joint in flexion, extension and from side to side. Over the dorsal and plantar surfaces of the joint, the long extensor and flexor tendons, respectively, pass to the distal phalanx, so that the proximal phalanx is held as it were in a sling upon the head of the first metatarsal bone. Tension on these two tendons, when the toe is straight, pulls the phalanx backwards against the head of the metatarsal, and so long as the pull is straight in the long axis of the bones, it only increases the pressure on their articular surfaces, and does not produce any change in their relative positions. But should there be the slightest deviation of the phalanx to one side or the other, the tension will pull it round still further to that side and a deformity will result.

This is the common mode of development of hallux valgus. Sinking of the arch of the foot, with its accompanying elongation, throws a tremendous strain on the tendons which pass to the great toe. It is rarely that equilibrium is maintained with the toe straight; still more rarely does the toe deviate inwards in response to the pull upon it (though it may do so, as in the case of hallux varus already mentioned); in the vast majority of cases the toe is displaced outwards, and hallux valgus is the result.

But the long tendons are not alone concerned in the production of this deformity. Of the five short muscles attached to the great toe, the flexor brevis is inserted on both sides, and therefore does not cause lateral deviation; tension on the abductor hallucis tends to produce inward deviation unless this is prevented by the boot or by the greater pull of the abductors; the abductor obliquus, abductor transversus (if in action), and the innermost division of the extensor brevis digitorum, all tend to produce outward deviation of the phalanx. Almost invariably the outward pull preponderates over that in the opposite direction at least enough to give a start to the valgus deformity, which is then made good by the tension of the long tendons.

The tendon of the extensor longus hallucis can always be felt tightly contracted and displaced outwards, and it can generally be seen standing out under the skin. The long flexor tendon is too deeply placed to be felt externally, but at operation it also is found to be tightly contracted. Secondary shortening of the external lateral ligament still further fixes the deformity. On the inner side, the uncovered cartilage on the head of the metatarsal in time becomes atrophied, while the overgrowth of bone behind it forms a prominence exposed to friction and pressure, and this, with the bursa over it, is the chief source of annoyance to the patient.

Occasionally, as mentioned above, the great toe remains straight in spite of the tension on it, the factors which make for abduction and adduction being equally balanced. We then have a condition in which the great toe is held stiffly in the straight position with the intra-articular pressure greatly increased. In such cases, on account of the increased pressure, and possibly also on account of increased liability to injury, changes take place in the cartilages of the joint, which become atrophied and irregular at the centre, and irregularly hypertrophied at the periphery—osteoarthritic changes, in fact, which permanently destroy the mobility of the joint and fix it in the straight position. This condition is called Hallux Rigidus, and it also is a direct result of flat-foot, which is invariably present.

Lastly, it sometimes happens that in the development of hallux rigidus in the manner just described, the pull on the plantar aspect of the joint exceeds that on the dorsal side, or *vice versa*. In the one case the toe becomes fixed in a moderately flexed position—Hallux (Rigidus) Flexus; in the other it is extended—Hallux (Rigidus) Erectus.

Treatment.

The treatment of hallux valgus should include that of the accompanying flat-foot. Slight cases do not complain of the toe, but of the foot, and in these cases, cure of the flat-foot removes the condition which gives rise to hallux valgus. When relief is sought for hallux valgus itself, the deformity is always well-marked, and, unless the treatment is to be merely palliative, some operation will be required to correct it.

An operation which is very frequently performed for this condition is excision of the head of the first metatarsal bone. This operation is a bad one, though it often gives great relief. It is bad because it removes one of the chief supports of the arch of the foot, so that the affection of the toe may be cured, but at the expense of the foot. This objection has been met by the argument that while the head of the first metatarsal is an important bony point in the normal foot, it loses its importance as a support of the arch when the foot is flat, and therefore its removal does not matter. But the aim of treatment should be to restore the arch of the foot as well as to straighten the toe. Removal of the whole metatarsal head permanently destroys the arch, it makes the subsequent treatment of the flat-foot impossible, and greatly impairs the usefulness of the foot.

But often, when the patient has suffered much from pressure on the sensitive enlarged metatarsal head, its removal gives immediate relief—a relief which overshadows all his subsequent disability. He has long ago forgotten what it is like to have a normal foot, and the contrast between the fixed pain before, and its absence after operation, is enough to satisfy him. On the other hand, in more recent cases, in those who have not suffered so much, and especially in those who wish to return to some active occupation, the relief is not always so striking, and the patient experiences to the full the disability of a permanently broken-down arch. If enough bone is removed, the toe is movable, but it is a poor stunted thing, very apt to stick up, and of very little use to the patient; if only a part of the head is removed, the joint becomes stiff and painful unless special means are taken to prevent it. This operation should, therefore, be reserved for exceptional cases in which the flat-foot is confirmed and hopeless, and the toe-joint is already stiff and disorganised, and in these cases some form of arthroplasty is the operation of choice.

Another operation which is very commonly done for hallux valgus. consists of excising the bursa, chiselling off the bony prominence on the inner side of the head of the metatarsal, and then forcibly straightening the toe after dividing the contracted ligaments on the outer side of the joint. The fault of this operation is that it is incomplete. The long extensor tendon is often divided, because it is in evidence. but seldom if ever is any attempt made to divide systematically all the contracted tendons. The result is that the toe is brought straight at the time of operation, but the tendency to relapse is very great; constant attention is required afterwards to prevent it; and when this ceases, the deformity returns.

An extension of this operation is clearly indicated by the pathology of hallux valgus. The operation which I have performed in all ordinary cases for some time past is as follows:—A curved incision is made over the enlarged metatarsal head, and a flap is turned down on the inner side, so that by retraction both the dorsal and plantar surfaces of the joint can be exposed. The tendon of the extensor longus hallucis is then divided, after which the innermost tendon of the extensor brevis digitorum is exposed and cut across. Next, the tendon of the flexor longus hallucis is sought in the groove beneath the metatarsal head and being hooked out, it also is cut across; this tendon is always found tightly contracted, and its division effects an obvious relief of tension on the great toe. A flap of bursa and joint-capsule is now turned forwards attached to the inner side of the base of the phalanx. The rest of the bursa is excised, and the prominent overgrowth of bone on the inner side of the metatarsal head is chiselled off, leaving a smooth rounded surface. The toe is now forcibly abducted (inwards), tearing or stretching the soft parts on the outer side of the joint. As a rule this is sufficient to bring about over-correction of the displacement without any tendency for the toe to spring back, but sometimes it is necessary to divide the external ligament or the tendons of the short muscles inserted into the outer side of the phalanx. The former may be divided from within the joint; the latter should be exposed and identified by retracting the flap before they are divided. The toe being now slightly abducted (inwards), the flap of capsule which has been left attached to the inner side of the phalanx is sewn back with stout catgut to the soft parts on the inner aspect of the metatarsal bone—*i.e.*, to the abductor hallucis. Finally, the skin flap is replaced and sutured without drainage. This operation has given excellent results in a number of cases. By systematic division of the contracted soft parts, especially the two extensor and the long flexor tendons, the tendency to outward displacement of the toe is entirely overcome. The metatarso-phalangeal joint is preserved and retains its mobility; and by suturing back the flap of fibrous tissue attached to the inner side of the phalanx an internal lateral ligament is formed which retains the toe in position. In some cases I have inserted the long extensor and flexor tendons into the head of the metatarsal bone in order to preserve their action, but I do not think this step is really necessary; it slightly prolongs the operation and I have not seen any ill-effects from their simple division.

After the operation proper boots must be worn and treatment must be directed to the flat-foot which is invariably present.

FOOT AND MOUTH DISEASE IN MAN—APHTHOUS FEVER. (*a*)

By C. M. O'BRIEN, M.D., L.R.C.P.,

Physician to City Hospital for Diseases of Skin and Cancer, Dublin; Honorary Member of the Dermatological Society of France; Fellow of the Medical Society of London.

Amidst the grey routine of my daily grind it has ever been my wont to bring under notice of the profession things within my purview which appeared to me of interest to it. I am happy in the belief that my humble efforts in this respect have been fully justified by reason of the full, free and unfettered discussion which they invoked on each occasion. Actuated by this spirit, I bring the report of this case before you to-night, in order to place on record notes of a cutaneous affection which falls to the lot of few to meet.

The epidemic of foot and mouth disease in cattle which swept this land from shore to shore in 1912 and which created such financial havoc and black despair amongst a large portion of our population enables me to relate my only experience of this malady as it affects mankind. Although the statement at first sight may seem somewhat paradoxical, it is, nevertheless, true to say that perhaps the most interesting feature associated with foot and mouth disease in man is the paucity of its bacteriological literature, and in search of this literature the point above all others which impressed me most is, that in an age like the present, of modernism and medical research, how little, after all, we are helped towards a positive diagnosis in this as in many other cutaneous affections by other than those senses which are the heritage common to all and which served Æsculapius in such good stead long before the death of Grecian priest-craft and even the dawn of medical history. It would appear that the first reliable record of foot and mouth disease in man was made in 1695, by Valentin, of Hesse. In 1834 three Continental veterinary surgeons named Hertwig, Mann, and Villain, while investigating the disease in cattle, wished to know if it were communicable to human beings, and as an experiment voluntarily drank a quart each of the milk from a cow suffering from the infection. On the second day Hertwig suffered from fever, headache, and itching of the hands and fingers. Five days later vesicles appeared on the fingers, hands, tongue, cheek, and lips. Mann and Villain developed vesicles on the buccal mucosa. In 1896, during an outbreak of foot and mouth disease in Berlin, several instances of its spread to man were reported, and unhesitatingly confirmed by Virchow, after an investigation which for minuteness and completeness of detail could not fail to influence the most sceptical.

A child fed on milk of diseased cows had chill and fever with gastric disturbances and later an eruption of vesicles on lips, tongue, and the clefts between fingers and toes. A shepherd infected himself by holding in his mouth the knife with which he had pared the diseased feet of sheep. In 1883, Sir Charles Cameron, C.B., M.D., Chief Medical Officer of Health for Dublin, during the epidemic in this country of foot and mouth disease in cattle had under his care a man who contracted the disease through direct inoculation. He presented a rash on both feet and hands which developed into vesicles later. The throat, lips, and mucous membranes had also distinct vesicles. About the same time Sir Clifford Allbutt saw the buccal eruption in three children during an epidemic of foot and mouth disease in Yorkshire.

Cases of infection through butter made from infected milk are on record, of which the following is a good illustration:—

On November 18th, 1890, a veterinary student in Berlin had sent to him by his brother-in-law a packet of fresh butter made from the milk of cows suffering from foot and mouth disease. On the following day he ate some of the butter for the first time. During the next night he was feverish, and on the morning of the 20th he found his lower lip red, swollen, and covered with vesicles which were itchy. Later the vesicles spread to the buccal mucosa.

Similarly, Schneider gives cases caused by infected cheese, and Friedberger cases from virulent buttermilk. Instances of infection by inoculation have been observed, of which the following is perhaps the most interesting and instructive, and as it presents many points in its clinical history which resemble the subject of my paper I am induced to give full details as they appear in the *Veterinarian*, 1831:—

The patient was a farmer who had injured one of his fingers in drenching a cow suffering from foot and mouth disease. The wound took on an unhealthy action, and after some days he was taken ill with a cold shivering fit. This occurred in the evening, and by the following morning the cold fit had been succeeded by fever. Twenty-four hours later vesicles formed on the gums and tongue.

Instances of transmission of the virus of foot and mouth disease from lower animals

---

(*a*) A paper read before the Section of Medicine, Royal Academy of Medicine in Ireland, January 31, 1913.

to man both by inoculation and otherwise could be further multiplied if time allowed or necessity demanded, but I feel convinced there are few if any serious thinkers amongst us to-day who entertain much doubt upon this particular point. For myself I candidly own that if at any time in my career I entertained the least doubt as to the transmission of foot and mouth disease from lower animals to man that doubt is dissipated for all time by the undermentioned case, notes of which *tout ensemble* constitute a clinical picture not easily counterfeited.

Case :—G. J. B. consulted me in my study on August 12th, 1912. He now permits me to publish the following :—

Veterinary Inspector, Irish Agricultural Department, M.R.C.V.S., æt. 35, married. Family history—unimportant. Personal history—of temperate habits ; had scarlet fever at the age of ten. Otherwise he always enjoyed very good health. On July 9th, 1912, while in discharge of his duty as Veterinary Inspector to the Irish Agricultural Department, he was bitten by a sheep on the index finger of the left hand while examining the beast for suspected foot and mouth disease on an infected farm at Swords, co. Dublin. Having applied an antiseptic dressing to the wounded finger and used a thin rubber finger-stall as an additional protection, he continued his daily examinations without intermission, not anticipating any serious results. About three weeks later the wound appeared to form an abscess to which the patient applied an abscess knife, with every antiseptic precaution. There was no pus found ; the local pain and tenderness continued and the wound did not heal. As his colleagues of the department were all fully occupied coping with the outbreak, and as his services as a result were badly needed, he declined to lie up. On the morning of August 11th, redness and swelling appeared on both hands and fingers, accompanied by great itching of the parts, with a few small raised white swellings like little lumps under the skin especially round the nails. By night time slight itching of the upper part of both feet, accompanied by a sensation of pin pricks in the soles, which became more pronounced when walking. He also complained of feeling out of sorts for a day or two previously. Bowels were confined ; slight headache was present, with loss of appetite and some colicky pains.

Having received the foregoing particulars I proceeded to examine the patient. A thick, well set up man, about 5 ft. 6 ins. in height, of exceptionally good muscular development. Rather younger in appearance than stated age. The fingers and dorsal aspect of both hands were markedly swollen and covered over with a dull, reddish, raised rash, which stopped short somewhat abruptly an inch above the wrists. Examining closely, immature vesicles were observed here and there over the surface of the rash, more especially in the clefts between the fingers and immediately above and around the finger nails. A sensation of great itching over this region was complained of. On removing the dressing of the injured finger, the edge of the wound gaped, and although no pus exuded on pressure, nevertheless it exhibited few signs of healing. There was no perceptible involvement of the lymphatic glands. Examination of the throat exhibited congestion of the fauces with some vesicles. Vesicles were also observable on the inside of the lips, gums, and side of the tongue. The latter appeared swollen and tender. Mastication, deglutition, and talking were painful. The saliva was increased and the voice less distinct than normal. The temperature registered in the mouth was just 100°, and never exceeded this during the entire illness. The urine was high coloured, of acid reaction, specific gravity 1020, sugar and albumin absent. The heart, lungs, and other organs appeared quite normal. The patient complained of increasing itchiness over the dorsal aspects of both feet, and excepting a slight redness above and inside both knees, no rash was perceptible on lower extremities at this stage. But there was a sensation of sharp pin-pricks over the soles of both feet, rendering locomotion troublesome. Knee-jerks were normal, ankle-clonus present.

Condition of patient on August 13th, 9.30 a.m :—Excepting the slight rash on inside of thighs, which has now entirely disappeared, all the previous symptoms are more pronounced. Vesicles fully formed about the size of peas on lips, tongue, and fauces. Saliva trickles from the mouth. Swallowing and speaking more painful, while in addition the dorsal aspects of both feet present a rash precisely similar to that previously described on hands, the rash extending to ankles and stopping short at this point on both feet. Vesicles in process of formation are also observable between the clefts of the toes and around the toe-nails. Temperature 99.5°.

The same evening the patient was seen by Sir Charles Cameron,. CB., M.D., in consultation with me. Vesicles were present on the throat, the side of the tongue, the fauces, and inside of the lips. The contents of vesicles which in the early stage were clear had now become somewhat turbid. In some instances the vesicles on mucous membranes had coalesced and ruptured, leaving small shallow ulcers with dark red base. Sir Charles Cameron, after a careful examination of the patient, said the case presented symptoms precisely similar to a previous case of foot and mouth disease in man which he met with in the epidemic of 1883. Saliva continued to trickle from the patient, and the painful swallowing permitted now of liquid nourishment only. The progress of the case continued without alteration—the temperature remaining between 99° and 100°.

On August 15th the rash on the hands began to fade, the vesicles ruptured, and further vesication ceased, but the soreness of the throat and free flow of saliva continued for some days. On August 17th Sir Thomas Myles, F.R.C.S., saw the patient in consultation with Sir Charles Cameron and myself. This was the seventh day of the illness. Fresh vesicles had by this time ceased to appear, and only the remains of previous ones were in evidence on the throat, lips, and both feet. These with the copious saliva and difficult deglutition were the only data to guide us now. Sir Thomas Myles examined the patient's feet, throat, and hands very minutely. He also examined the wounded finger. He said that as a result of his examination, from all he had seen, and from the history given by the patient, he believed the case to be one of foot and mouth disease, but seeing it on the seventh day, after the acute attack, it was impossible for him at that stage of the illness positively to confirm the diagnosis.

It is agreed that neither sex nor age, race nor class, affords exemption from foot and mouth disease. It is also agreed, thanks to the research and logical deductions of Loeffler, that the bacillus, virus, or whatever it may be termed, which causes foot and mouth disease, is sufficiently small to allow of its passage through the finest pored porcelain filter and to elude the most powerful microscope. Like the biblical grain of mustard-seed, this virus or bacillus gives rise to results in man which have taught me the lesson derived from personal observation and experience, that apparently slight cases, if neglected, may lead to grave results. Whether these results depend on tissue changes effected by the direct action of the bacillus or its toxins, are questions still in the womb of time.

In conclusion I take this opportunity of expressing my indebtedness to Sir Charles Cameron. From all the literature within my reach (both local and foreign) bearing on this subject I think I am correct in saying that Sir Charles has the unique distinction of being, not only the only medical man in the United Kingdom, but the only medical man alive to-day who can speak from practical personal experience of two separate cases of foot and mouth disease in man due to direct inoculation from the lower animal, one so far back as thirty years ago, during the epidemic of 1883, the other which is the subject of the present paper. I am also indebted to Sir Thomas Myles, M.D., F.R.C.S., whose examination of the patient excludes any ambiguity in diagnosis which might arise from a surgical standpoint. I also thank Mr. T. T. O'Farrell, F.R.C.S., Bacteriologist to the City Skin Hospital and to St. Vincent's Hospital, for his examination of the epithelial *débris* and contents of vesicles, with negative results. My thanks are in an especial manner due to my former patient, Mr. George J. Bell, M.R.C.V.S., who in the cause of veterinary and medical science, permits me to bring before the Royal Academy of Medicine in Ireland, this case which is as far as I know the first published case of its kind in Great Britain.

Literature.
Virchow's "Archiv Path. Anatomie."
Law's "Veterinary Medicine."
Hewlett's "Manual of Bacteriology."
Allbutt and Rolleston's "Medicine."
Berliner Klin. Wochenschrift.
Veterinarian, 1831.
Osler's "Medicine."
Taylor's "Medicine."

TUBERCULOUS MENINGITIS IN ADULTS.

By GEO. A. CRACE-CALVERT, M.B.Lond., M.R.C.S., L.R.C.P.
Physician to the Vale of Clwyd Sanatorium.

This paper is based upon 7 cases of tuberculous meningitis occurring, during the past 11 years, in patients who had been, or were actually, at my sanatorium; and though some presented signs of tuberculoma in the early stages, all ultimately died of meningitis.

I have been able to find very little reference to the subject in the recent medical journals, but there is a paper by Dr. Warrington, read before the Association of British Physicians in 1910 and published in the *Lancet* of December 17th of that year, and I am indebted to that for some of my information.

Of all the forms in which tuberculosis manifests itself, tuberculous meningitis is undoubtedly the most fatal, whether in children or adults; and I can find very few records of cases of recovery, and I believe that they were all in children. Martin (a) gives 20 undoubted cases of recovery since 1894.

The disease is practically always secondary to tuberculous infection elsewhere, and perhaps most often to pulmonary tuberculosis, but it may occur as the terminal affection of tuberculous disease anywhere. Cases have been reported—especially in children—in which it was supposed to be primary infection; but in most of these a primary lesion has probably been overlooked, and might have been found in caseating bronchial, or other, glands, and, in fact, it has been asserted that the bronchial glands are always markedly affected.

Again, it may be part of a general miliary tuberculosis, the other evidences of which have been overlooked, because the meningeal symptoms develop so rapidly and at once monopolise the clinical picture. Horder, in his book on "Clinical Pathology," says that tuberculous meningitis inevitably means generalised tuberculosis; but in a more recent article (*a*) I see that he says that it may be more localised.

In the cases of which I have notes it has always been secondary to some lesion elsewhere; and out of 30 cases the primary lesion has been in the lungs in 23, in the lungs and larynx in 2, in the pleura in 2, and the other cases started from a chronic tuberculous cerebral tumour, and subacute tuberculous epididymitis with abscess formation.

In 3 of Dr. Warrington's cases no primary lesion could be detected during life in the lungs or elsewhere, and, as no post-mortem was made, no primary lesion is mentioned. In another there was a history of phthisis of ten years' duration; and in the last there was old apical disease, caseating bronchial glands, and a solitary caseous tubercle of the cerebellum.

Cornet (*b*) says that it may occur after such primary lesions as caries of the wrist, lupus, tuberculosis of the nose or generative organs; and also after trauma or operation. In the majority of cases it is of hæmatogenous origin, bacilli gaining direct access to the brain and meninges by the blood-vessels, owing to the breaking down of a primary focus; and in many cases it is possible to find tubercles directly in the blood-vessels, or nodular tuberculous enlargements may be found upon the smaller arteries, and many of these small tubercles in the perivascular sheath of the small arteries are in varying stages of caseation.

In addition to its origin from blood-vessels, it may also arise from infection along the lymphatics leading from neighbouring structures; and Cornet mentions cases which have followed on enucleation of the eye for tuberculosis of the iris, or directly from the same disease when enucleation was not permitted. And in the same way it may occur after tuberculous disease of the ear-bones or after postpharyngeal abscess.

Beattie (*c*) says that, in cases of meningitis of the spinal cord, the infection has most probably been conveyed from bronchial or mediastinal glands by way of the lymphatics.

Bridge (*d*) says that it does not occur often in cases of pulmonary tuberculosis, and Fowler and Godlee state, out of 531 cases of pulmonary tuberculosis occurring in Brompton Hospital in the three years 1892–94, only 18, or 3.3. per cent., developed meningitis; whilst West found it to occur in 1.5 per cent. of his own fatal cases. In about 520 cases in my own sanatorium during the past 11 years I know of 7 cases—though, of course, there may have been more that have not come to my knowledge—and of these, 4 have occurred in the last 15 months. This works out at about 1.5. per cent. From other sanatoria I have been able to collect 23 cases occurring in the last 13 years.

An interesting point, and one that it is desirable to elucidate as far as possible, is the question of the relationship—if any—between the administration of tuberculin and the incidence of meningitis. Some writers say that the disease may be due to the employment of tuberculin; but Cornet does not consider

---

(*a*) *Brain*, vol. xxxii

(*a*) Latham and English's *System of Treatment.*
(*b*) *Nothnagel's Encyclopædia*, vol. "Tuberculosis."
(c) *Brit. Journ. of Tuberculosis*, vol. i., p. 212.
(*d*) *Tuberculosis*, p. 97.

that there is any proof of this, and says that amongst 420 patients to whom he has given tuberculin he has not had a case of meningitis. I have now given tuberculin to 106 cases, and 4 of these have developed meningitis. But of these 4, one had not had any tuberculin for over a year; another none for a month; whilst of the other 2 cases, one—a very bad laryngeal case—had only 4 doses, but the throat condition was so bad that the prognosis was hopeless to begin with, though the larynx was undoubtedly improved at first under tuberculin treatment; and the last, with tuberculous pleurisy and a raised temperature, was making great improvement and just beginning to get about when, after about 9 doses, he took much more exercise than he had been ordered, and began with headache.

Of course, one knows that tuberculin produces a focal reaction, and in this way might produce an extension of disease or a breaking down of a primary focus elsewhere, and thus set bacilli free, which might find their way to the meninges; or if solitary quiescent tubercles were already present in the brain, the focal reaction in them might light up meningitis. But, on the whole, even though one occasionally sees a lighting up of plumonary disease after the exhibition of tuberculin, it is nearly always confined to the lungs. And, on the other hand, one frequently sees a lighting up of the pulmonary disease without tuberculin being used. And, further, as in 25 out of 30 cases of which I have notes, tuberculin had not been used, I am inclined to think that it is only coincidence, and that there is no real connection between them.

In connection with the cases in which the primary lesion is in the lungs, there does not seem to be the slightest relation between the duration, extent, or degree of activity of the pulmonary disease and the probable occurrence of meningitis. It does not seem to matter what degree of arrest or apparent healing has taken place, the patient may still develop meningitis. Cases occur whilst the disease in the lungs is quite active though in none of my cases of really acute pulmonary disease did it develop; and here, of course, one cannot be altogether surprised if it did develop, especially if it is correct that tubercle bacilli are always in the blood. But, on the other hand, it occurs in patients who have, to all intents and purposes, quite recovered, and who have led an ordinary, active life for years. In only two of my cases was the disease at all active, and in most of the cases mentioned to me the disease in the lungs was fairly chronic.

With regard to the question of sex, Bonney states that the greater portion of his patients have been females, though he admits that it is more common in males. Of my own cases 6 occurred in males; and of cases from other sanatoria 26 occurred in males and 4 in females.

It is perhaps a little difficult to explain the reason why so many males are affected, but it may possibly be due to the fact that male patients, as a rule, worry much more about their illness, because so much depends upon their quick return to health or actual recovery.

Bonney states that irritable, highly excitable people develop meningitis more frequently than those of a phlegmatic temperament, and he goes on to say that people of a sunny, cheerful disposition are less prone to it; but this is not altogether borne out by my cases, as three at least were of a very cheerful disposition.

The predominance of male patients is not explained by the possible more frequent incidence of pulmonary tuberculosis in males, as if all ages be taken there is practically no difference between the sexes as regards liability to death. After the thirty-fifth year the male rate of death from pulmonary tuberculosis is higher than the female, but this does not altogether account for the disparity.

A history of excessive indulgence in alcohol has also been stated to be frequently associated with the subsequent development of tuberculous meningitis; but in my limited experience this type of case has never developed it, but has died as a result of the pulmonary disease being of a rather malignant type, perhaps before any secondary infection or focus could develop (*a*).

Bonney has never seen it amongst Jews, Negroes, or Swedes.

It is seldom seen at ages over 50. The ages in my cases varied between 29 and 44; whilst Dr. Warrington's cases were between 26 and 45, though he states that Jaquet reported 7 cases in which the ages ranged from 41 to 68. So that it rather seems as if the period between 30 and 45 is that in which a patient may possibly develop the disease; whilst at ages over 50 there may be lessened opportunities of extension of the pulmonary processes, or the primary lesion may be firmly scarred or calcified by this time, or the patient's immunity may be such that no spreading of the disease is possible.

Symptoms and Signs.—The classical symptoms and signs in children may be briefly stated as headache, vomiting, fever, intolerance of light, together with optic neuritis and Kernig's sign; and of these, headache is usually well marked from the beginning. But in adults the symptoms of the onset of the disease are very insidious and diverse, though occasionally it is quite abrupt. In some cases localising symptoms or signs occur, and headache or intolerable pain in the head and neck develop at once; whilst in others subjective symptoms are the first thing noticed, and the objective signs only follow at a later period and leave no doubt as to the diagnosis. The most frequent mode of onset seems to be the non-acute type, where odd subjective symptoms gradually show themselves, and may persist for a few days or even weeks before any definite localising signs of meningitis present themselves. These subjective symptoms may be such things as loss of appetite, irregularity of the bowels, general weakness, sleeplessness, loss of control of the sphincters, change of manner or disposition, mental irresponsibility, vague pains in the head, excitement or mild hysteria or trigeminal neuralgia. A patient who is naturally reserved may become rather foolish and laugh a good deal, whilst another may become quieter than usual. In other cases there may be temporary periods of rambling discourse or wandering delirium, from which the patient can be roused by questioning, though the answers may at first be a little confused. Lastly, there may be tremor or twitching of the extremities, or gradually increasing paralysis of the muscles of a limb or of the eye; but, as a rule ocular and motor signs do not develop until after the subjective symptoms have become fairly well defined.

Thus we see that the onset of tuberculous meningitis may be very insidious and take place in a multitude of ways. But though the onset may be varied or prolonged, sooner or later severe persistent headache develops. This headache is usually frontal, but may be at the back of the head and extend down into the neck, or it may start locally and then radiate over the rest of the head. With the headache there is usually more or less fever—though this is sometimes absent.

Vomiting does not seem to be so constant a symptom as in children, and in only two of my cases was it present to any degree; in one near the beginning of the illness, and in another near the end. It must, of course, be independent of food to be of use as a sign of disease.

Constipation is usually marked, though to a certain extent it may be due to morphia, if this has been given for the relief of pain.

Retention of urine frequently occurs, but both this and constipation are often replaced at a later period by loss of control of the sphincters. One patient lost control of the sphincters quite early.

The abdomen usually becomes retracted. Hiccough may be present, and in one case was intense during the last three days of life.

Respiration is often slow and shallow, but towards the end may become Cheyne-Stokes in character, or

---

(*a*) During the discussion which followed it was stated that tuberculous meningitis did not occur in the insane, though chronic pulmonary tuberculosis was very common, and massive tubercle was not infrequent.

become rapid and irregular without any local pulmonary condition to account for it.

The pulse at first is usually quickened and irregular, and may remain so all through; but sometimes it is slow and of high tension.

Intolerance of light and noise is usually present early, especially when the headache is severe.

Tache cerebrale was only present in one of my cases.

Optic neuritis seems to be a very variable sign, and was absent in at least four of my cases, and in four out of five of Dr. Warrington's cases. Other ocular symptoms are irregularity of the pupils, strabismus, and paralysis of any or all the ocular muscles; but none occurred in my patients. Kernig's sign is usually present, but was absent in three of Dr. Warrington's cases, and also in two of mine, where its presence would have been a great help in diagnosis.

There is often pain or stiffness in the neck muscles, which may lead to a certain degree of retraction of the head; and this pain may also extend to the muscles of the back, especially if the meninges of the cord are affected as well.

In one case intense cyanosis and dyspnœa were present, but were probably due to miliary tuberculosis of the lungs.

Whatever symptoms are present, the headache is usually the most marked, and persists until the patient becomes apathetic and finally comatose, when there can be a certain amount of moaning, or convulsions may develop, and death ensues a few days later. In my experience it has been the usual thing for a patient to become comatose several days before the end, and then, after a day or two, to recover consciousness for a day or longer—and even to appear quite rational, as though actual recovery were going to take place. But after this short recovery, coma comes on again, and death takes place a day or two later. But cases have been recorded where there were actually periods of improvement, during which the temperature returned to normal and pulse and respiration became regular. In one (*a*) there was apparent recovery for a month, during which the fever and subjective symptoms were absent; and then a second attack occurred, and terminated the patient's life in three weeks—four months after the onset of the first symptoms. In another the attack lasted four days, and was followed by a period of well-being and increased strength lasting two months. This was followed by another attack lasting six days, and after an interval of twelve days, by another lasting five days. Finally, after a few more days of freedom from symptoms, the disease ended fatally at the end of five weeks.

These remissions may perhaps be explained as follows. If the rupture of a tuberculous focus has occurred, abundant toxins and comparatively few bacilli may be poured out. Then the toxins may be excreted from the body in a few days, provided that the rupture becomes covered with a fibrin coagulum, and so the symptoms may abate, for any tubercles which are still in an early stage of development cannot manufacture enough toxin to cause symptoms. Next the tubercles increase in size, a fresh supply of toxins or bacilli is formed, and symptoms again appear. Or, again, the presence of toxins may excite the formation of a supply of antitoxin sufficient to neutralise them temporarily, only sooner or later to be flooded by a further development of toxins. This process may perhaps be helped by the pressure on the brain causing a smaller supply of blood to the tubercles.

Diagnosis.—The occurrence of severe persistent headache during the course of pulmonary tuberculosis, or of practically any form of tuberculosis, is always very suggestive of the onset of meningitis, a[illegible] neuritis or Kernig's sign be present in addition, the diagnosis is pretty certain. Again, the presence of odd and unaccountable mental symptoms should raise a suspicion of the disease.

In any case—especially doubtful ones—the fluid obtained by lumbar puncture will nearly always give the correct diagnosis. In these cases the fluid is usually increased in quantity, and so under more or less pressure, slightly turbid, or, as in two of my cases, quite clear, it contains a small amount of albumen—more than in health, and an excess of lymphocytes, and in 80 per cent. tubercle bacilli are found. It often possesses slight reducing power.

As illustrating the difficulty of diagnosis in some cases I may perhaps give details of a few cases.

A man æt. 36 developed pleurisy at the right base somewhat insidiously in August, 1911. No pulmonary disease was detected then. It cleared up, but returned in May of this year (1912), when he was sent to me. Signs of old pleurisy were present and nothing could be heard in the lungs because of the thickened pleura but I found one or two tubercle bacilli in the sputum after a prolonged search. The signs cleared a good deal, but the temperature remained somewhat raised, and at the end of six weeks I began giving him tuberculin. By the middle of August (six weeks later) his temperature had been normal for 10 days, and I gave him short walks; but, unfortunately, he felt so well that on three occasions he did about twice as much as I had intended, and next day, on August 18th, he did not feel so well and stayed in bed. During the next few days his temperature slowly rose, and by the 22nd he had a very severe headache, which was relieved by bromo-chloral. It came on again next day, and was again relieved by bromo-chloral.

The pain was now chiefly supra-orbital on the left side, and Dr. Hill-Abram saw him on August 24th, as I was suspicious of meningitis, and he said that beyond the headache there was no other symptom or sign pointing to meningitis, though lumbar puncture was not done, as we did not wish to give a general anæsthetic, and did not think it wise to do it without, as he was a very highly strung man. We hoped that it would turn out to be neuralgia or possibly sinusitis. Next day he would not take food unless fed, and on the 26th he was seen by a dentist, who could not find any cause for neuralgia. For 3 more days the headache was very severe, and there was intolerance of light and occasionally very slight disturbance of speech, though he was usually quite rational and answered when spoken to. Dr. Horder saw him on August 30th, and said that without lumbar puncture he could only be very suspicious of tuberculoma, as practically no signs were present, though there had been vomiting once or twice, but not clearly independent of food. Lumbar puncture was done, under an anæsthetic, and an increased quantity of fluid was found under only slight pressure, upon which Dr. Horder reported that it showed an increase of cells, a globulin ring, rather more albumen than usual, but no tubercle bacilli, conditions which would be produced by a patch of meningitis or a local deposit of tubercle. The leucocyte count was 13,000, which excluded generalised tuberculosis. He died 10 days later, after convulsions and coma had supervened.

A man with chronic, more or less healed, disease of the lungs had been leading an active life for nearly 3 years when he got a severe cold with neuralgic pains in the head, and only a fortnight later did headache, vomiting, and constipation appear, and he died 17 days later.

In another, 6 months after leaving the sanatorium very severe pains in the back and head came on, and were supposed to be rheumatic; and it was not until nearly a month later that slight disturbance of speech was noted and he become delirious.

Another, who had not been feeling well for some time and had taken more alcohol than was good for him, was suddenly seized with intense headache, and was first supposed to have influenza and then delirium tremens, as he wandered a good deal at night and was violent on some occasions. Coma followed and he died about 9 days after the onset of headache.

Another was up and walking about for nearly a fortnight with bad headache, which was supposed to be due to biliousness.

In another, headache was the first sign, and was continuous but not so severe as to keep the patient awake

---

(*a*) *Nothnagel's Encyclopædia* vol. "Tuberculosis," p. 670.

at night, and often when talking to the doctor the pain nearly disappeared, only to return with more severity afterwards. Temperature varied from 100° up to 102° or 103°, but no other signs developed for nearly two weeks, when there was some vomiting followed by coma.

Prognosis.—In adults the disease seems to be fatal invariably; and though cases of recovery are reported in children, I have failed to find any in adults. The duration is variable, and death may take place in a few days (9 days in one of my cases), or it may be delayed for several weeks (in another case 6 weeks), but probably most cases end within 3 weeks from the onset. Dr. Jane Walker has reported a case to me where an attack began on November 11th with vomiting, headache, and prostration, which stopped after a few days. Some weeks later the symptoms returned, and death took place on January 20th, *i.e.*, 10 weeks after onset.

Treatment.—This up to the present seems to have been mainly symptomatic. Practically nothing in the way of drugs relieves the headache except morphia. At first a mixture of bromide and chloral may do so, and antipyrin may give temporary relief; a dose of calomel often gives temporary relief to the headache. Iodides may be tried with a view to causing absorption of the tubercles. In a child of 6, inunctions of iodoform (grs. 15 to the ounce of vaseline) every 8 hours brought about recovery,(*a*) and in a small boy (*b*) potassium chlorate produced immediate improvement and ultimate recovery, and these methods of treatment might be tried in adults. Wet cupping over the parietal bosses will often restore the patient to consciousness temporarily (MacAlister). Inunctions of mercury may do good.

The removal of cerebro-spinal fluid by lumbar puncture will often give temporary relief, but in neither of my 2 cases in which it was performed was there any change. However, in children several cases of complete recovery have been reported, and one in particular, mentioned by Bonney,(*c*) in a girl of 16 after 2 months' illness. Lumbar puncture was performed daily during the first two weeks, and altogether 24 times, during which a total of 574 c.c. of cerebro-spinal fluid containing tubercle bacilli was removed. On the other hand, Cleveland (*d*) says that in 4 cases in children, in no single instance did lumbar puncture have any effect on the course of the disease, and even intracranial drainage had very little effect; whilst Babinski (*e*) seems to think that cranial puncture with free drainage gives better results, at any rate in the case of intracranial neoplasms with cerebral œdema.

In adults, where the prognosis is so bad, it seems to me that any procedure which may improve the condition of the patient—if only temporarily—is quite worth a trial; and if a single lumbar puncture—perhaps done for diagnostic purposes only—affords any relief, then I think it would be quite worth repeating, frequently if necessary, if only to give time for the trial of other remedies. And this brings me to the question of tuberculin.

Now, tuberculin is not an active rememdy, like, say, potassium iodide in syphilis, and needs as a rule a fair amount of time to develop its full action, which lies in stimulating the production of antibodies to neutralise the toxins, though we must remember also that Beraneck has proved that tuberculin has the power of weakening the virulence of tubercle bacilli.

If the meningitis be but a part of a generalised tuberculosis which may not have had full time to develop before the meningeal part has caused death, it follows that tuberculin can probably do very little good. But if the meningitis is not part of a generalised tuberculosis, and is, so to speak, only a secondary localised infection, then we may possibly be able to do some good by the employment of tuberculin, especially if we can prolong life by ameliorating the effects of the increased cerebro-spinal fluid by performing lumbar puncture. After all, the symptoms and signs which we associate with meningitis seem to be chiefly those due to pressure, though, of course, toxin poisoning must play a part, and, if frequent or continuous drainage will hold these in abeyance, there may be time to develop a certain amount of immunising power by the exhibition of tuberculin.

It has been stated that the increased intracranial pressure is not the immediate cause of death, but that this is probably due to the effects of an inflammatory process in the brain. If this is so, one would have expected it to leave some after effect in, or on, the brain of those children who recover, but so far as I can find most of them seem to have recovered perfectly—one reported by Dr. Martin certainly had slight right monoplegia of the arm. Perhaps in those who recover this inflammatory process is not very marked.

Coma and convulsions may also be due to absorption of toxins from the cerebro-spinal fluid; if so, drainage by lumbar puncture will of necessity reduce the amount available for absorption, and so should help towards improvement and give an opportunity for using tuberculin.

Again, in tuberculous meningitis it is quite common to find scanty tubercles in the fossa of Sylvius, and the initial number of bacilli is probably small and the general phenomena of intoxication are often quite slight, and it therefore seems possible that the development of the disease might be cut short by tuberculin, especially when one remembers that it weakens the virulence of the bacilli, and even to a large extent dissolves the bacillary substance (Sahli); and this action would also extend to the free bacilli in the cerebro-spinal which probably help to spread the disease.

Further, since the free bacilli and small tubercles are in direct contact with the fluid into which antibodies can easily pass, these bacteriolytic and antitoxic actions of tuberculin may be more marked in the case of the small tubercles of tuberculous meningitis than in the case of the large, more compact, foci of disease such as exist in the lungs, where the absence of blood-vessels prevents the development of the full action of the tuberculin.

Theoretically, if this is regarded as localised tuberculosis the method of "immunisation without tolerance" described by Riviere and Morland, should be used. In this method tuberculin is given in small constant (optimum) doses at fairly long intervals of, say, 14 days, so that the tolerance of each dose may disappear before the next is given. But, unfortunately, the usual duration of the disease is very short, and if we are to do any good it seems to me that we must get in more than one dose of tuberculin—which is practically all that time would allow by this method; and I would suggest starting with a very small dose of tuberculin (B.E. or P.T.O.), and then giving small but increasing doses every third or fourth day, as it is necessary to produce an active immunity as soon as possible. A child was treated on these lines, and the meningitis certainly retrogressed though death ultimately resulted from broncho-pneumonia.(*a*) In one of my cases tuberculin was tried, but not until the disease had been going on for over a fortnight, and then it made no difference.

Of course, one of the main difficulties in giving tuberculin in these cases lies in the focal reaction, which will increase the headache, but this might be controlled by morphia. In a case of cerebral tumour—the notes of which have been sent me by Dr. Trubshaw of Mold, and in which the diagnosis was confirmed by Dr. Hill-Abram—tuberculin was used in fairly large doses at intervals of about 14 days, and though it produced very severe headache and some vomiting at first, the girl recovered, and now, 2 years after, feels very well and has no symptoms. But, of course, this differs from meningitis in being a slowly progressing growth and therefore just the class of case in which tuberculin should do good.

But if the cases of meningitis be diagnosed with certainty early enough it would seem quite worth trying tuberculin—even though the reaction increased

---

(*a*) *Lancet*, 1911, vol. i., p. 24. (*b*) *B.M.J.*, 1910, vol. i., p. 1168. (*c*) *Pulmonary Tuberculosis*, p. 347. (*d*) *Medical Press*, 1911, vol. i. p. 83. (*e*) *Practitioner*, vol. lxxxv., p. 262.

(*a*) *Lancet*, September 21st, 1912.

the headache—combined with lumbar puncture to relieve pressure and drain off toxins, as otherwise the prognosis is almost absolutely hopeless.

I am indebted for information as to certain cases to the medical superintendents of the following sanatoria: Nordrach-on-Mendip, Linford, Cotswold, Mundesley, Crossley, Delamere, Benenden, and East Anglian.

OPERATING THEATRES.

BOLINGBROKE HOSPITAL.

IRREDUCIBLE FEMORAL HERNIA.—MR. SWAINSON operated on a woman, æt. 52, with an irreducible femoral hernia. There was a five years' history. Up till two weeks ago the patient had received no treatment. The swelling then became irreducible and gave rise to pain. On admission there was a swelling over left femoral ring about the size of a walnut, the principal diameter of which was clearly below Poupart's ligament. The swelling was to the outer side of the pubic spine and fluctuated. A diagnosis of femoral hernia was made and it was decided to operate.

A straight vertical incision was made over the swelling about three inches in length, and commencing about half an inch above Poupart's ligament. The incision was deepened at the upper end to expose the external oblique. The sac was readily separated by blunt dissection with two pairs of forceps, and on opening it with scissors it was found to contain about three drachms of serous fluid. The neck of the sac was then isolated and pulled down a little, clamped, ligatured and allowed to slip back into the abdomen. A mattress suture of iodised catgut was passed through the fascia over the pectineus and the inner end of Poupart's ligament drawing them together and to some extent occluding the femoral ring. No vessels required ligature, four small ones being closed by forcipressure and torsion. The wound was sewn up with silkworm gut.

Mr. Swainson said that this case might be called a hydrocele of a hernial sac. It was essentially a hernia, and the important thing to do was to remove the sac. The method of closing the femoral ring by a mattress suture was satisfactory as regards results. Alternatively, a flap of pectineus muscle and its fascia might be turned up and sutured to Poupart's ligament. Mr. Swainson said he had had no experience of the insertion of a metallic staple fixing the inner end of Poupart's ligament to the pubic bone and thus closing the femoral ring—the method associated with the name of Roux.

IRREDUCIBLE UMBILICAL HERNIA.—Mr. Swainson operated on a woman, æt. 53, who was the subject of a large irreducible umbilical hernia. The coverings over the swelling were much thinned, and it was possible to make out with tolerable accuracy the presence of bowel and omentum. The woman was obese, and in the large transverse fold of integument below the swelling there was some intertrigo; this had been diminished by treatment previously. The parts had been sponged over with a solution of lysol and then with a lotion of biniodide of mercury in methylated spirit.

The swelling, which was about the size of the top of a cottage loaf, was included between two curved incisions, which together formed an ellipse, the major axis of which was ten inches in length and transverse in direction, the minor axis being about five inches. The incisions were gradually deepened through the fat to expose the external oblique, and the neck of the sac gradually approached by careful dissection above and below and at the sides. Partly by tearing and partly by dissection with scissors the sac was isolated and a small opening made into it. The opening was gradually enlarged and adherent bowel and omentum drawn out, adhesions being ligatured from time to time. Large heavy clamp forceps facilitated this process. Before the adhesions could be properly freed it was necessary to draw out more than two feet of colon; there was no small bowel in the sac, and a considerable portion of omentum was removed. After tying all the small vessels and sewing up a hole in the meso-colon, it was possible to return all the bowel into the abdomen and to cut off the neck of the sac flush with the abdominal wall. The aperture into the abdomen, when stretched laterally, presented a transverse slit some four inches long, it having been increased by about one inch by a transverse cut with scissors. It was still further increased transversely for about one inch by another cut with scissors, and it was then found possible to overlap the edges of the incision, the upper edge being drawn under the lower edge. This was fixed by two mattress sutures of stout thread and an overlapping continuous stitch of iodised catgut. The upper and lower edges of the wound, comprising skin and much subcutaneous fat, were now brought together so as to leave, when sewn up, a straight transverse incision ten inches in length.

Mr. Swainson said that he recommended the operation he had performed as giving good results. The parts could, as a rule, be brought together without much tension. It was sometimes possible, by making transverse incisions outwards from the neck of the sac, to split the abdominal wall into layers and overlap them, thus giving additional security. Sometimes, as in this case, the muscular and aponeurotic portions of the abdominal wall were so thin and parchment-like that it was better to merely overlay, and not split them into layers.

TRANSACTIONS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD JULY 2ND, 1913.

The President, MR. J. M. COTTERILL, F.R.C.S., in the Chair.

DR. SYM and MR. SCOT SKIRVING showed a girl, æt. 24, after

EXCISION OF AN ORBITAL FIBRO-SARCOMA

by Kronlein's method. There was slight impairment of vision, which disappeared after hypermetropia had been corrected. There was proptosis in the axis of the orbit. There was no impairment of movement. It was thus seen that the tumour was not attached and that it lay within the cone of the muscles. The absence of a bruit or thrill favoured the view that the condition was neoplasm. The absence of neuritis indicated that the optic nerve was not involved. The tumour was removed by Kronlein's operation, but the incision was made concave forwards and there was very little scar. The result was otherwise very good except for impairment of the movements of the external rectus.

MR. SCOT SKIRVING showed a girl, æt. 9, treated by ileo-sigmoidostomy for inveterate tuberculosis of left humerus and scapula. There was improvement for about a month after the operation. Since that time the condition has remained *in statu quo*.

MR. G. D. MATHEWSON read a paper on

CONDUCTION DEFECTS IN THE HEART.

The importance of recognising conduction defects was considerable, as they not merely indicated that the auriculo-ventricular bundle was affected but gave evidence of much wider affection of the myocardium. In complete heart block the ventricle usually had a beat of about 30 per minute, while the pulsation of the jugular vein was often twice or three times as rapid. Many of these cases could be recognised without the electrocardiograph. In cases of partial heart block the electrocardiograms gave important help. Vagus stimulation might exaggerate the effect of partial heart block. The organic blocking was not removable by means of atropine. The digitalis group depressed conductivity and were contra-indicated in heart block. The most hopeful cases were the syphilitic where a gummatous change might be affecting the auriculo-ventricular bundle.

DR. RUSSELL said he was greatly impressed with the skill and ingenuity which had led to the introduction and use of this form of research. There was, however, a tendency on the part of those who carried out the work to exaggerate the significance, or rather the importance of the method. It supplemented but did not displace the older methods. The significance of heart block was that some of the branches of the A.-V. bundle were involved in a degenerative process, but there might be extensive degeneration without these bundles being involved.

Dr. W. T. RITCHIE remarked that it was only after the introduction of the string galvanometer that such conditions as auricular fibrillation and paroxysmal tachycardia has been elucidated. The method also gave information regarding the tone of the heart, and enabled the clinician to localise focal lesions.

A DISCUSSION ON INTESTINAL TOXÆMIA

was introduced by Dr. William Russell. A very wide field was included in the title. Two factors had to be recognised. These were the individual or personal factor and the substances dealt with (the extraneous factor). In connection with the personal factor, the great subtlety of the chemical dynamics of the animal body within normal or average limits had to be remembered and, besides, the most extraordinary idiosyncrasy to alimentary toxæmia from food, beverages and drugs might be met with. The substances to be dealt with came into such close relationship with the individual that the two factors could not be separated when the effects or results were looked at clinically. The broad problem before the clinician was based upon the fact of the prevalence of constipation or colon stasis. From the consideration of that problem might be excluded the person who ate in excess, and digested and assimilated what he ate, and became fat and plethoric.

The problems in conspitation were: (1) The effect of constipation on the secondary digestion, including in this the excretory side of the process and the consequent retention of the waste products of cell metabolism; (2) the absorption of bacterial toxins; and (3) the reflex effect of constipation on the vascular system. The absorption of bacterial toxins and their effects was an aspect of the problem which was a natural development of our modern knowledge of bacteriology, and in dealing with it the ordinarily ill-balanced tendency to consider this, the newest aspect of the subject, to the exclusion of others had been seen. The question of the absorption of products of intestinal putrefaction must be regarded from the standpoint of the accompanying constipation, which impeded and greatly hindered the detoxicating function of the liver. The passage of toxic substances into the blood was removed by the removal of the constipation. It was not claimed that we knew the number of these toxins; that we knew the effect on the body of any one of them save some of the most potent of the putrefactive products; and we knew less of the effects of combinations of them. The problem was further complicated by idiosyncrasy to common foodstuffs, and by probable variations in the susceptibility of the ductless glands to such substances. The abdomino-vascular reflex had an important influence in producing phenomena which are erroneously referred to toxæmia. Examples of the effect of the reflex were attacks of angina minor after a meal. The hypertension associated with a bilious attack could be dispelled by a dose of calomel or blue pill. Both as regards the influence of toxins absorbed and of constipation acting the individual susceptibility played an important part. The skill of the clinician lay in his power of giving to each factor its due and correct place in the individual case, realising that no single factor was the whole factor. Excessive protein food was the only demonstrable factor in an ocean of speculation. Attempts to rush the position as if the way had already been paved by science were utterly false.

Professor ALEXIS THOMSON said that the surgeon had great difficulty in connection with this subject because the physicians were not agreed about it, and it was obvious that in connection with several parts of it the surgeon had no *rôle* at all. He did not know where to draw the line between constipation and stasis nor between stasis and colitis. He had great difficulty in believing that stasis was to be accounted for mechanically possibly as a result of the erect posture. Nerve action played a large part, and he was not disposed to place too much reliance on X-rays, at least to the extent that they might indicate his course to the surgeon. Assuming that there occurred a condition of stasis in the colon that required operative measures for its relief, surgeons were not yet in a position to express an opinion, based on experience, as to the method of operation to be selected. The choice ranged from a simple appendicostomy, through various forms of short-circuiting or entero-anastomosis, to resection of a part, or of the whole large intestine. The choice would be mainly influenced by the comparative safety of the operation and by its efficacy in restoring the function of the bowel.

Appendicostomy was so safe and so efficient that it should always be considered before a more serious operation was performed. The results of ileo-sigmoidostomy were as follows. Patients required aperients for a fortnight after the operation. Three days after the operation a green stool was passed. The motions afterwards became more normal in colour and tended to be firmer but did not become formed. Their increased frequency was a drawback, but as a rule appetite increased and symptoms improved. If the physician could establish the existence of stasis and resulting symptoms, then the surgeon could give relief. The whole subject was in a state of transition, and it was impossible at this stage to come to any definite conclusion.

The PRESIDENT said he was in complete agreement with Mr. Thomson regarding appendicostomy. He had seen many cases where good results had followed. The major proceedings should be approached in a much more cautious spirit than some surgeons showed.

Dr. CHALMERS WATSON said that an important factor was the effect of constipation on the mucous membrane. Constipation alone could easily be put right, but if there were changes in the mucous membrane the patient might continue to void septic stools. Repeated examination of the stools might be necessary before an opinion could be formed. The natural stool and the irrigation fluid passed after an enema might be examined. If after ten weeks of drug and dietetic treatment with lavage there was no improvement then there was an indication for surgical interference. The results if intestinal toxæma might be seen as rheumatic or quasi-rheumatic affections, as neuræsthesia or as alimentary manifestations—symptoms simulating appendicitis or latent duodenal ulcer. In these cases he examined the stool and then placed the patient on a restricted diet. The effect on the stools was noted. It was not always possible to say how the treatment was effective, but it was often successful and symptoms disappeared.

Dr. PRICE said that in the course of the last three years he had examined some 150 colons with the X-rays. Physicians did not know how to treat cases of dilatation of the colon either early or late. The X-rays showed stasis and the amount of bowel that was affected by atony. The only operation the surgeon could perform was removal of the affected part. The colon was ballooned and thin and no use for absorption. If the surgeon knew the extent of this he could plant the ileum into a healthy part of the colon. The best operation was the one which saved the largest amount of healthy colon. The radiographer could show the surgeon what operation to do. The lesion was progressive and the surgeon alone could do any good.

Dr. GULLAND said that he thought the difficulties in some of these cases might be exaggerated. If it were ascertained that constipation was present and whether the constipation were due to an affection of the bowel or of some other part, most cases could then be dealt with successfully, though some were hopeless until the surgeon was called in. Much information regarding intestinal toxæmia might be got by an examination of the urine. Bacteriological examination of the fæces was not of much service, as most of the organisms present did little or no harm. Examination of the fæces was an important guide to the state of digestion and might give information regarding the condition of the intestinal wall.

Dr. FLEMING said that many persons showed no signs of intestinal toxæmia as long as they remained constipated, but suffered acutely as soon as they had an attack of diarrhœa. The passage of bismuth through the alimentary canal might be quite rapid, although there was a considerable amount of intestinal stasis.

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

A clinical meeting of the Society will be held at the Medical Society's rooms, 11, Chandos Street, Cavendish Square, on Wednesday next, July 16th, at 5 p.m. Cases at 4.30 p.m.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, July 5th, 1913.

CYSTS OF THE WRIST.

THE treatment of cysts of the back of the wrist, so common in certain professions, is as simple as it is efficacious. The back of the hand is painted with tincture of iodine, and after five minutes the hand is bent so as to stretch the teguments and render prominent the little tumour. The cyst being fixed with two fingers of the left hand, a hypodermic needle is introduced and two or three drops of tincture of iodine are injected and the needle withdrawn. A gentle compressive bandage is applied for four or five days. If after that time the cyst is still apparent, a second injection is made, after which the cure is certain. It may happen, however, that a third injection is necessary, but it is very rare. The injection provokes no pain worth speaking of; a sensation of heat and numbless is all that is complained of.

The advantage of this method of treatment lies in the fact that the patient can continue his or her work as before. The injection of tincture of iodine has never caused any accident, says Dr. Pakowski, who has treated thus several cases.

Communication of the cyst with joint, affirmed by text-books, is in reality very rare, and even otherwise, the cyst being filled with a gelatinous mass, the iodine remains localised and cannot reach the articulation.

BRONCHO-PNEUMONIA OF INFANTS.

It must never be forgotten that infants are very sensitive to cold, and should be sufficiently protected against changes of temperature. Broncho-pneumonia is a very common consequence of more or less prolonged exposure to cold.

Once the malady has set in we have no means, says Dr. Pironneau, of arresting the process which has invaded the pulmonary tract. The child will in any case be placed in a large, ventilated room and isolated, if possible, as the malady is more or less contagious.

Against the congestive phenomena, revulsion by means of mustard is very useful. Eight doubles of thin gauze, impregnated with a warm liquid mixture of brown mustard, are applied as a jacket around the thorax and left on five or ten minutes, after which a warm bath of ten minutes is given. The application is renewed two or three times a day.

The temperature of the room should not be inferior to 84° F., while the apartment will be steamed by the vapour of eucalyptus leaves. An atmosphere saturated with watery vapour is very useful to facilitate the expulsion of the mucous secretions, while it diminishes the cough. Inhalations of oxygen gas render good service in cases of cyanosis; subcutaneous injections of the same gas are also very stimulating.

If the child is depressed, subcutaneous injections of camphorated oil or artificial serum are indicated. As general diffusible stimulants, a little brandy or champagne and water may be given.

Where there exists an element of infection, intramuscular injections of electrargol or frictions beneath the arms of collargol ointment are useful. During convalescence, the child will be protected against cold by flannels and will not be carried out of doors unless the temperature is soft and warm.

TYPHOID FEVER.

Dr. Vernier, of Hyeres, has a method of his own for treating typhoid fever, and if his reports are correct, which we have no reason to doubt, it is very successful.

As soon as the malady is diagnosed, he prescribes for the first day an intestinal disinfectant as follows:—

Calomel, 12 gr.
Salol, 6 gr.
Lactose, 1 dr.

Divide into three powders; one every six hours. (These powders are renewed every fourth or fifth day.) A large cup of milk is ordered every three hours, and during the intervals diuretic drinks and weak beef tea. As principal treatment he gives half-an-hour before each cup of milk half a wineglass of

Tincture of iodine, 80 drops.
Pearson's solution (arsenical), 50 drops.
Iodide of potassium, 2 gr.
Sulphate of strychnine, 1-5th gr.
Boiled water, 1 pint.

This solution is suspended the day calomel is taken.

A large place is given to disinfection of the natural orifices—mouth, nose and pharynx. The teeth are brushed morning and evening with a soft tooth-brush moistened and rubbed with soap. The mouth and throat are rinsed after each cup of milk with a solution of salicylate of soda, to which is added a little glycerine, and also once or twice a day with a little alcohol and water to tonify the mucous membrane. The following ointment is introduced into the narines night and morning:—

Boric acid, 30 gr.
Resorcin, 6 gr.
Menthol, 1 gr.
Vaseline, 6 dr.

During the whole course of the malady a cold enema is given night and morning.

With the iodo-arsenic method and hygienic precautions above mentioned, all his patients (30 cases) got well without having to resort to cold bathing. In some forms of hyperthermia the author applied cold compresses to the abdomen, and sometimes the ice-bag to the heart. In any case, with the therapeutic tripod—iodine, arsenic, strychnine—the temperature fell between the twelfth and the twentieth days.

GERMANY.

Berlin, July 5th, 1913.

AT the Congress für Gynæcology, Hr. Sellheim, Tübingen, discussed

THE RELATIONS OF THE REPRODUCTIVE FUNCTIONS OF WOMEN TO THE HEART.

He showed graphically that the loss of blood of a well-nourished woman during menstruation reached in amount double that of her body weight at eighteen years of age. Then came the period of building up, when the material was furnished for the development of the fœtus and its nourishment after birth. With six children the mother had again twice built up her own corporal structure. From his own physiological examinations he was satisfied that, contrary to what might have been expected, there was no sexual difference between the woman's heart and the man's, and no anatomical basis for such an assumption. On the contrary, compared with the male curve the female heart between the twentieth and the fortieth year showed a falling off. The temporary high requirements of the female heart, corresponding to the efforts of reproduction. showed a retardation as regarded increase of bulk at a time when. from a physiological point of view, an increase might have been expected.

Hr. Krömer discussed

THE DISTURBANCE OF THE RENAL FUNCTION IN ECLAMPSIA.

Excluding, he said, the rare cases in which there was no albumen in the urine, in eclamptic cases, in addition to excess of albumen and cylinders there was oliguria with a high specific gravity, and especially retention of sodium chloride, which never failed in the anasarca cases. Sudden drop of the chloride curve was an indication of threatening eclampsia; it also indicated a return of the fits in the puerperium. The atypical albumen-free urine cases with normal excretion of chlorides were exceptions, they afforded no prognosis and were the most suitable cases for the Stroganoff treatment. The test of the eclamptic kidney by means of pheno-sulpho-phthalein confirmed the serious mischief in the kidneys, as the colouring material was excreted only up to 40 or 50 per cent., and in the first two hours only to 25 per cent. where the kidney was injured, whilst when the kidney was sound, excretion took place up to 60 to 75 per cent.

Hr. Vogt, Dresden, spoke on

PREGNANCY AND ADDISON'S DISEASE.

He said that only one case had been recorded—by Barlow. The cause of the disease was syphilis of the suprarenal capsule. A second case had been observed in the Dresden Klinik years ago; here there was tuberculosis of both bodies. The pregnancies ran a normal course in both instances, also the labours. Patients suffering from morbus Addisonii were in far greater danger in the early part of the puerperium than during pregnancy, or even through the labour itself.

Hr. Novak related the results of experiments on rats made with a view of learning the relation, if any, that existed between the suprarenal bodies and the genital organs. His view was to determine what followed extirpation of the suprarenal bodies as regarded the genital functions. His experiments were made on 146 rats. As these animals had an accessory suprarenal structure, there was by no means total exclusion of the influence of these bodies but only a hypo-function which, in most cases, led to a fatal issue in a shorter or longer time. The rats that had been deprived of their suprarenal bodies showed a distinctly faulty sexual development. This anomaly was the more pronounced the younger the rat was. Both impaired potency and capability to conceive were very pronounced. In two rats that were deprived of the bodies in question during pregnancy this did not undergo any interruption.

Hr. Ad. Schmidt, as a guest, discussed

DISEASES OF THE HEART AND PREGNANCY.

He said that even to-day, auscultation and valvular disease held a higher place in the treatment of cardiac cases than they ought to do. The intensity of the murmur and the accentuation of the impulse did not run parallel with the gravity of the cardiac disease. That was the case in mitral stenosis, although he otherwise recognised its special position. Much more important were the size of the heart, the changes in the pulse, the persisting stasis in the liver, and the lesser circulation, and, above all, the capacity for function in the heart and its reserve of power. It was not every decompensation that had such a grave significance as regarded prognosis. It depended rather on what was the cause of it, what form it showed, and how it reacted to digitalis and rest. If it should be said here that myocarditis in pregnancy demanded interruption of the pregnancy, it would be true of the severe cases only. There were a number of milder cases only characterised by acceleration of the pulse, after bodily exertion, in which there was no indication for this. Between this and the worst forms were all possible degrees. I must be accepted that the milder forms of myocarditis, after anginas and other infections, were of bacterio-toxic origin. There was the question whether cardiac diseases in pregnancy were not more affected by the toxins than by the mechanical factors. It should not be looked on as something that was certain that a myositis in pregnancy, a decompensation in the first half of it a combination of heart disease with nephritis, always called for artificial termination of the pregnancy. Nothing remained but to judge and decide each case for itself.

DR. E. PARRY EDWARDS has been appointed County Medical Officer and School Medical Officer for Carnarvon.

AUSTRIA.

Vienna, July 5th. 1913.

AUTO CÆSAREAN SECTION—WITH RECOVERY!

AT the meeting of the K.K. Gesellschaft der Aerzte which was held in Vienna on June 6th, Dr. R. Patek showed a woman who, four years previously, had, at the conclusion of the full period of pregnancy, cut through the anterior abdominal and uterine walls with a razor—by a single slashing incision! The fœtus was extracted alive; and, as the medico-legal investigation of the case showed, was drowned in the suds contained in a washing-tub into which it had fallen. The woman was brought into hospital, where the edges of the uterine wound were carefully approximated and sutured after complete disinfection. The peritoneal cavity was duly drained, and the opening in the abdominal wall closed by careful approximation of its various layers. The patient soon recovered. And now the supplementary report was forthcoming: she had again become pregnant, after an interval of four years from her former experience; and, on this latter occasion the process of parturition had been normally completed, notwithstanding the fact that an abdominal hernia had formed at the seat of the former self-inflicted incision.

RADIUM-RAYS IN THE TREATMENT OF UTERINE CARCINOMATA.

Dr. E. Wertheim made a communication which described the treatment of two cases of uterine carcinoma with radium-rays. In both cases the alpha and beta-rays were screened by enclosure in a leaden capsule of 2.5 mm. thickness, so as to prevent any deleterious action of the surrounding tissues. This was placed in the vagina, immediately before the portio vaginalis uteri. In one of the cases, which up to the date of the report had been treated to 2,500 mg. periods, the growth had proved completely refractory. The case was one of a hard, fissured growth on the surface of the portio vaginalis, which presented the microscopic characteristics of adeno-carcinoma. In the second case, on the other hand, the influence of the radiations was extraordinarily striking. Before the beginning of the treatment, a soft cauliflower excrescence, of the size of a hen's egg, completely filled the upper third of the vaginal canal, the uterine wall could not be distinguished, and the parametrium on the right side was infiltrated and puckered. Even as early as after the third night a marked deliquescence of the growth was observable, and at the close of the seventh night from the commencement of the treatment the cauliflower growth had completely shrivelled up. Examination now displayed only a shallow ulcer on the anterior lip of the os, which was quite soft to the touch; the posterior lip appeared wholly intact. The infiltration and puckering of the right parametrium had disappeared, and the case, which, before the commencement of the radium-ray treatment, had seemed placed beyond the border-limit of operability, since appears to have become a very eligible one for surgical manipulation, so that a radical procedure may now be adopted without any technical difficulty. The microscopic revelations in this case also demonstrated the effective action of radium. At the various successive stages of the treatment the examination of sections removed from the growth displayed changes precisely identical with those described by Döderlein and Bumm as taking place in the course of their mesothorium treatment. As the procedure is continued there occurs vacuolisation of the carcinoma cells, fragmentation of the nuclei, pycnosis; and, as the treatment still goes on, we have actual solution of the cell masses which had passed into the necrotic state. Thus the fact is established beyond doubt that, in cases of uterine carcinoma, we obtain by the radium treatment results completely similar to those obtained by the use of mesothorium. It is, indeed, very remarkable, too, that in the case just described, this effect was obtained in a relatively very short time—even after 1,500 mg. periods; while the authorities who have recorded corresponding results from the use of mesothorium were obliged to employ it up to 3,000, or

4,000, or 5,000—and sometimes even a greater number—of milligram periods.

But, for a complete cure, that consummation still seems as rare as was noted in the Halle report. The uterus was thoroughly examined after extirpation by Professor Schottländer, and he found numerous cancer cell groups, not only in the cervical canal, above the os uteri, but also on the posterior wall; and, indeed, some of them were placed at specially remote distances from the original surface growth. Whether these deposits could also have been brought to shrivel and disappear under the radium treatment is a question which must, of course, remain open for the present.

CANADA.

Toronto, June 24th, 1913.

Meeting of the Ontario Health Officers' Association.

On May 29th and 30th, the annual meeting of the Ontario Health Officers' Association took place in the Parliament Buildings, Toronto. The meeting was largely attended, and some really excellent papers were read. Among these were papers by Dr. Charles H. Hastings, Medical Officer of Health of Toronto, and Dr. Dickinson, dealing with the "Duties of the Modern Medical Officer of Health in Cities and Towns," while a feature of the meeting was the reading of a paper by Professor Whipple, of Harvard, entitled "The Value of Vital Statistics in Relation to Public Health."

The paper read by Dr. Charles Hodgetts, Medical Adviser to the Canadian Commission of Conservation, Ottawa, aroused a considerable amount of discussion. He argued that medical inspection of schools, being a part of public health work, should be placed under the direction of the health department and not in the hands of the board of education as is the case in Toronto. He contended that the existing system caused duplication of work and a waste of public money. Also he objected to nurses being allowed to make diagnoses of disease in school children. The members of the association present evidently were of the same opinion as Dr. Hodgetts, as a resolution was passed to be sent to the Minister of Education requesting that the medical inspection of schools be transferred to the control of the Ontario Provincial Board of Health.

Dr. J. A. Amyot, in the evening of May 29th, gave a public address on "The Transmission of Communicable Disease." On the second day a lively discussion was initiated by the proposal that the medical practitioner should be paid for reporting communicable diseases, births and deaths. The general opinion appeared to be that the practitioner was entitled to remuneration for work of this description, and a resolution was passed to the effect that the local municipalities be required to pay a fee of fifty cents (2s.) for reporting each birth and death and each case of communicable disease.

Dr. Parfitt and Miss Eunice Dyke read papers on subjects relating to tuberculosis, while the milk question was discussed in papers read by Drs. G. G. Nasmith and A. W. Macpherson. Two papers were read on the sewage question—one on "Disposal of Waste and Garbage," by Dr. Hall, and the other paper on "Disposal of Domestic Sewage," by Dr. R. E. Wodehouse. Sanitary work amongst foreign population was dealt with Dr. C. N. Laurie.

Dr. Chas. J. Hastings, Medical Officer of Health of Toronto, was elected President of the Association for the coming year.

CONTINENTAL HEALTH RESORTS.

Aix-les-Bains.

Aix-les-Bains is at present crowded with visitors of every nationality. This is not surprising when we consider its accessibility, the attractiveness of its surroundings, and its central position for pleasure excursions on land and lake; mountains, glades, ravines and caverns on every side contribute to the beauty of this queen of French summer resorts. Its amusements, too, are equally abundant and diversified. In its casinos and theatres, operas, concerts and "distractions" for young and old are lavishly provided from noontide to midnight. Golf links, tennis courts, hippodromes, pigeon shooting, horse races, and even dog shows are not wanting. All tastes are amply catered for, so that each individual guest may select for himself out of the abundance offered. Each also can choose from a wide range of excellent hotels, pensions, apartments, villas, chalets and cottages the most suitable accommodation.

There is certainly no lack of choice, whether of residence or amusement, at Aix-les-Bains. The musical performances here are, as they have long been, of genuine artistic interest, and the theatrical presentations and ballets are unexcelled. The "Grande Cercle" Casino has a hall renowned for its mosaic ceiling and coloured glass, a commodious theatre with fine scenic appliances, handsome salons for balls, concerts, baccarat and other games of chance, reading and writing rooms comfortably arranged and liberally supplied with magazines and journals in various languages; dining rooms and café-restaurants overlooking beautiful lawns on which fêtes are held daily and nightly. The "Villa des Fleurs," in extensive grounds, has also splendid salons for concerts and games and an open-air theatre, which is very agreeable during the fine summer evenings with which Aix is greatly favoured. Amongst the beautiful excursions that can be made from Aix is that to the picturesque Lake Bourget, with its old Chateaux de Bourdon and Chatillon and its ancient Abbaye d'Hautecombe (the Westminster Abbey of Savoy), containing the remains of princes of the Savoyard Royal House, under monuments of vastly different styles ranging from strictly classic severity to almost grotesquely flamboyant. Amongst those quietly resting here are some connected with our Plantagenet dynasty.

There are many exquisite trips by rail or carriage to the Gorges du Sierros and the Grèsy Cascades, also the famous Gorges du Fier, where, on terraces overhanging the ravine torrent, the visitor may lunch on delicious trout caught and cooked while waiting. A mountain railroad ascends from Aix to the semi-Alpine "After Cure" at Corbières, at an altitude of about 2,000 feet. The cog railway goes farther up the cliff side to Mont Revard, a resort 5,000 feet above sea level, where are hotels and chalets commanding superb views over parts of the Mont Blanc, Dauphiny and Chartreuse Alps. On Mont Revard is the recently developed Source des "Deux Reines" taking its name from Their Majesties of Holland, who were much gratified by their residence in the Corbières Sanatorium. The water of this spring, slightly mineralised and of great purity, is greatly appreciated as an internal adjunct to the external "Aix cure." The frequent passing in the streets of Sedan chairs (an admirable peculiarity of Aix-les-Bains for carrying patients safely to and from the baths and douches) reminds one that underlying and overlapping all else, and far more essential than exquisite outdoor scenery or indoor artistic attractions, the prosperity of Aix is primarily and permanently based upon the excellence of its medicinal springs; the modern appliances for the use of these waters (the arrangement of the thermes giving the physicians facilities for daily variations of heat and pressure so as to exactly meet each invalid's needs), the world-wide renowned "Aix massage" given here with inherited skill, and the high status of the Aix medical practitioners, whose thorough knowledge of how best to adapt the cure to each special case enables them to most efficiently utilise the remedial waters, the scientific appliances, and the skilful manipulations placed here under their control. Those wishing to best enjoy the place should come here in May or early in June, or after the middle of August; the hotels are less crowded, the weather delightful, and the hills, valleys and glades charming in their beautiful autumnal colourings.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Treatment of Tuberculosis in Edinburgh.

At the meeting of the Edinburgh Town Council on July 1st, notice was given of a motion to remit to the Public Health Committee to consider the expediency of the Royal Victoria Hospital, the Dispensary, and the Farm Colony being transferred to the Corporation, and to confer with the directors accordingly. At the same meeting a letter was read from Sir Robert Philip, intimating his acceptance of the post of expert adviser in connection with tuberculosis. The motion foreshadows a satisfactory solution of the difficulties which seemed to be growing up around the treatment of tuberculosis by the Corporation and the Insurance Committee. In the first place, it follows the lines of the Astor Report in making full use of existing agencies, and puts aside all idea of erecting independent competing institutions in a city already well supplied. Then it does away with one of the objectionable features of the original scheme—the treatment of early, curable cases and the segregation of advanced cases in the same hospital. If the principle of the full utilisation of the various parts of Sir Robert Philip's machinery be adopted, there is no doubt that the details of their transfer to the town will easily be adjusted, and in these circumstances Edinburgh will be in a very advantageous position in regard to tackling the tuberculosis problem.

National Insurance Act.

The first report of the Scottish Commissioners on the working of the Act has just been issued. It is stated that the initial working has been attended with less difficulty than was anticipated, and that the chief resistance was offered by farmers in certain well-defined areas and by employers of domestic servants, but that in the latter case the amount of persistent refusal to pay contributions has been small. Another class that has been prominent in opposing the Act is that of the Scottish shore fishermen, the question with them, however, arising out of the peculiarities of their employment, and being one of interpretation rather than evasion of the Act. The total number of insured persons is 1,434,966, a net deficit of only 39,000, as compared with the actuarial estimate. One of the chief problems awaiting solution is that of the casual labourer, especially in connection with agricultural work, and a special study of this is to be made by the inspectors during the ensuing summer. The number of deposit contributors is only 37,000—about half the actuarial estimate and not more than 2½ per cent. of all insured persons. The voluntary contributor has turned out an almost negligible element in the scheme. A list of the practitioners on the various Scottish panels is given, with the average number of insured persons per doctor in each area. In the counties, Orkney stands lowest with 137 patients per doctor, and Linlithgow highest with 737. The most common figures are between 300 and 400. In burghs, Rutherglen is lowest with 255, and Dundee highest with 1,638. In Glasgow and the Clyde district generally the number is about 1,000; in Aberdeen and Edinburgh 875 and 850 respectively. In the smaller burghs those with the largest number of patients appear to be those in which there is much female labour. For instance, in Leith the average is only 539, whereas in Kirkcaldy it is 967. Another factor which conduces to variation in these averages is the proximity of one burgh to another. In Leith, for instance, in which a very large proportion of the population is insured, the number of doctors on the panel is raised by the inclusion of many Edinburgh doctors, whereas in a town like Kirkcaldy, which stands isolated, the number of practitioners on the panel is not raised from outside. The number of persons permitted to make their own medical arrangements was at March 31st 6,555, or 0.44 per cent. of the total insured. Under heading of chemists this paragraph occurs:—"It is understood that in England, as contrasted with Scotland, the amount of medicine consumed per patient is higher; that the period for which medicines are prescribed to last is shorter, leading to more frequent repeats and consequent dispensary fees; and that the proportion of mixtures which are quickly made up to such preparations as pills and powders, which take some time, is considerably greater. Thus the Act has directed into the hands of the English chemist an increased volume of trade without conferring on Scottish chemists an equal or corresponding advantage."

Honorary Graduates at Edinburgh.

At the summer arts graduation ceremonial in the McEwan Hall, on July 4th, the hon. degree of LL.D. was conferred on, among others, Professor Greenfield, Dr. W. Allan Jamieson, Dr. John Stewart (Nova Scotia), Geheimrat Professor Strassmann (Berlin), and Professor J. Arthur Thomson (Aberdeen). Professor Greenfield is the late occupant of the Chair of Pathology in the University, which he held from 1881 to 1912; before that he was at St. Thomas's Hospital and the Brown Institute. Dr. Allan Jamieson is the well-known dermatologist, appointed in 1899 as the first University lecturer on diseases of the skin. Dr. Stewart was a house surgeon of the late Lord Lister in 1878, and has attained a high position in Canadian medicine. Dr. Strassmann is an eminent medical jurist, a successor of Caspar and Liman, whose pupils have almost a monopoly of the teaching of forensic medicine in German universities. Professor Thomson is the well-known biologist, fertile with his pen, and an adept at utilising the generalisations of biology in the service of sociological progress.

Report of Edinburgh Medical Officer of Health.

In his annual report Dr. Williamson deals exhaustively with housing conditions in relation to mortality, and points with satisfaction to the fall from 27 per mille forty years ago to 14 per mille at the present time. On analysing the returns it is found that the death-rate with the rarest exceptions follows density of population, and therefore a continued reduction depends on improved housing—prevention of undue massing of the population on restricted areas, supervision as to the subdivision of dwelling houses, and the closing of condemned houses. Cancer is showing no signs of diminution; it claims as many victims in the city as phthisis. The question of notification is hinted at and that of special hospital accommodation urged. The infantile death-rate has fallen to 110; only a few years ago it was 140-150. Here especially the housing conditions tell. In a suburban ward it is only 46, in St. Giles ward 155 per 1,000, while in certain areas it is as high as 250 and 277 per 1,000. Dr. Williamson advocates the utilisation of Colinton Farm Hospital for the treatment of early as well as late cases of phthisis; it has accommodation for 716 patients, and has never been occupied by more than 467. In 1907 651 cases of phthisis were notified; in 1912 there were 1,255—a figure indicating greater care, not an actual increase. The amount of phthisis varies directly with density of population—1.3 per 1,000 in the suburbs, 3.1, 4.5, 7.1 in the poor districts of the town. The birth-rate continues to decline. Comparing 1903 and 1912 we get the following figures:—

	Population.	Deaths.	Rate per 1.000.	Births.	Rate per 1.000.
1903 ...	318,219	4,963	15.59	8,112	25.49
1912 ...	321,884	4,701	14.6	6,700	20.81

BELFAST.

Lindsay Golf Cup.

In connection with the Ulster Medical Society the gold cup presented some years ago by Professor Lindsay was played for at the links of the Larne Golf Club, by the kind permission of the Council, on Wednesday, June 25th. There was a good entry, and Mr. T. P. Crymble, with a handicap of 5, was the successful competitor, Mr. A. B. Mitchell, with a handicap of 18, being the runner up. The competitors were most hospitably entertained to lunch and tea by Dr. and Miss Rankin.

British Medical Association.

At a meeting of the Belfast Division, held on June

24th, Dr. A. P. B. Moore was elected Chairman, and Dr. W. L. Storey was elected Secretary. Dr. Storey was also elected representative to the coming meeting at Brighton.

Royal Victoria Hospital.

The McQuitty Memorial Scholarship founded by a number of friends and patients of the late Dr. W. B. McQuitty was awarded, after examination, to Mr. W. McK. H. McCullagh. This is the second award since the scholarship was founded.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MEDICAL RESEARCH.

To the Editor of The Medical Press and Circular.

Sir,—Regarding my letter to the *Times* of June 25th, I think that you have read into it somewhat more than I actually expressed. My point is that it would have been better to have included the names of all distinguished workers on medical research in the committees of the great national fund for medical research. This applies especially to the Advisory Committee, which is not paid, and the counsels of which could therefore have been easily assisted in this manner without expense. It has been a little tactical error to omit some of the persons of whom I was thinking, more especially because such omission is habitually practised in this country. I could mention instances in which those who have actually done important work in several lines have never been consulted in the further prosecution of study on those lines, when such further prosecution has been undertaken by British Governments (generally after much palaver). England is a country in which the "climber" is very much in evidence; and the defect referred to is one which can be remedied only by giving prominent public notice to it.

At the same time, I think that in other respects the proposed scheme is excellent. I was asked to give evidence before the Astor Committee regarding the organisation side (and I am not competent to speak on the scientific side of tuberculosis work); and I am glad that most of the suggestions made by me (and others) have been adopted. Those who have brought the scheme to maturity are deserving of the very highest credit. The departure is a new one and we must all support it to the best of our ability. This country has fallen quite behind the rest of the world in its attitude towards science and art; and I hope that this new departure is only the first of others which will be taken.

One more point: the prize offered for successful work does not appear to me to be nearly sufficient. The fact is that young men are refusing to touch medical science for the simple reason that they get nothing out of it. It is a British delusion to imagine that everyone is going to sacrifice himself for the good of the community merely for the honour of the thing. People enter the medical profession to make a living as much as for humanitarian purposes.

I am, Sir, yours truly,
Ronald Ross.

18 Cavendish Square, W.
July 4th, 1913.

THE ROLE OF ALCOHOL IN DIABETES.

To the Editor of The Medical Press and Circular.

Sir,—I have only just now finished the reading of Prof. Saundby's clinical lecture which appeared in your issue of June 25th; but if not too late, I should like to be allowed to thank him for his most lucid and convincing exposition of the *rôle* of alcohol in diabetes and in pseudo-diabetes, or glycosuria. If there is one fact in clinical experience the solidity of which seems to me unshakable it is the fact that in any and every disease in which depression is a recognisable symptom alcohol, as a therapeutic agent, is invariably pernicious to the last degree. Whether or not aware of the true character of their malady, the vast majority of patients suffering from diabetes or glycosuria are affected by the subjective symptom which I style depression, and a very considerable proportion have recourse to alcohol in search of relief. Alcohol invariably aggravates the symptoms, and when eliminated improvement always follows. My main object in writing is, however, to suggest how great must be the harm that is now being caused in these directions by the enormous traffic in sham tonics containing alcohol as their sole potent ingredient—a topic discussed in your editorial columns within the past few weeks. It is literally true to state that the use of these remedies is aways leading many thousands of simple people along the road to lingering and painful death. I never fail to inquire for this abuse in cases in which my suspicion is aroused, and I have been astonished at the number that have revealed themselves. It would be interesting to learn Professor Saundby's experiences in this connection. The sale of alcoholic secret remedies ought to be prohibited by law. This was the view taken by the *Times* a few years ago, when in a remarkable leading article it dealt with the question. It has been a puzzle to me why the temperance societies and their organs in the Press have not tried to force the matter before the attention of Government. The evils were graphically laid bare last year before the Select Committee on Patent Medicine by Dr. Mary Sturge, of this city.

I am, Sir, yours truly,
Temperance Reformer.

Birmingham.
July 4th, 1913.

NON-DIABETIC GLYCOSURIA.

To the Editor of The Medical Press and Circular.

Sir,—Nothing more timely than Professor Saundby's article on diabetes has appeared in the Medical Press and Circular for some time.

The fact is we torture patients weak enough to follow our advice by depriving them of various articles of food which are possibly harmless, and we render their existence a misery by suggesting that they have a dreadful disease, when in truth the trouble is often only a transient error in metabolism.

It is lucky for the ordinary citizen that scatology is a somewhat repulsive science, otherwise we should be eternally requesting patients to bring us a sample of fæces, and after test-tubing it and finding an imperfectly oxidised product of intestinal excretion, we should horrify them by informing them that they suffered from scatorrhœa, kakorrhœa, or some such awesome ailment. Doubtless substances as important as sugar or albumen pass unobserved through the bowel.

Dr. Saundby tells us to beware of considering every patient in whose urine we discover sugar as a diabetic. This is the beginning of wisdom. But let me propound a heresy.

Is there any proof that a very moderate amount of sugar, or a very moderate amount of ordinary bread—such an amount as the patient craves for—really hastens the death of a diabetic? Of course, I shall be told that careful dieting lessens the amount of sugar in the urine, and that the quantity of sugar is a measure of the severity of the disease. But is it?

It is not so long ago since we forbade the fever patient to drink cold water. Now we know that it is the only thing that does him any good. May not the thirst of a diabetic be equally curative? Can the unquenchable desire of such a one for saccharine foods be a self-destructive one?

Long ago Herbert Spencer taught us that all life-giving desires were pleasure-giving desires; but all medical practice seems obsessed with the fallacy that what a patient wants to do or to take is bad for him. The countless millions of the lower animal kingdom have instinct alone to guide them, and why should we regard it as unworthy to be listened to in the case of man.

Touching on treatment, hormone therapy seems to show promise of great things, but one is always waylaid by the *post hoc ergo propter hoc* fallacy. I have two or three cases at present under my care to whom I have given holadin—a preparation of the internal secretions of the pancreas. One is a woman of 55, another a man of 65, the third a man of 30.

They all look well and state they now feel in perfect health; the great thirst has disappeared, urine is scarcely above the normal in amount, appetite is not abnormal, and, in fact, they insist that they are quite well, and refuse any but the simplest restrictions in dietary. At the same time, the sugar, although lessened, is still quite easily found in the urine.

I am, Sir, yours truly,
J. C. McWalter.

July 3rd, 1913.

ST. BARTHOLOMEW'S HOSPITAL—A WARNING.

To the Editor of The Medical Press and Circular

Sir,—May I ask your aid in bringing to the notice of the public the fact that certain persons who represent themselves as agents of the Helping Hand Legal Assistance Syndicate (late Red Cross) are obtaining money by an improper use of the name of this Hospital.

These persons are in the habit of calling at houses, particularly in the poorer districts, and presenting a circular issued by the above-named Society to the effect that the Syndicate are subscribers to St. Bartholomew's Hospital. They then sell tickets at 3d. each, which they state will entitle the holder to treatment at this hospital.

This statement is quite untrue, and it is not a fact that the Helping Hand Legal Assistance Syndicate are, or ever have been, subscribers to this Hospital. I have in my possession a letter from the Secretary undertaking to withdraw the circular above referred to; but, as I find it is still in use, I desire to make it quite clear that the persons who represent themselves as the agents of the Syndicate have no connection of any kind with this Hospital.

I am, Sir, yours truly,
Thomas Hayes,
Clerk to the Governors.

July 7th, 1913.

"MEDICAL ADVISERS" IN IRELAND.

To the Editor of The Medical Press and Circular.

Sir,—I have resigned (June 21st) my recently accepted appointment as "Medical Adviser in Respect of Insured Persons who shall be Alleged to be Suffering from Tuberculosis," and in due course I published my resignation in the Dublin Press.

I am, Sir, yours truly,
Henry M. Harrison.

59 Rathmines Road, Dublin.
July 2nd, 1913.

OBITUARY.

MR. ALFRED WILLETT.

We regret to record the death of Mr. Alfred Willett, F.R.C.S., Consulting Surgeon to St. Bartholomew's Hospital, which took place at his country residence, Wyndham Croft, Turner's Hill, Sussex, on June 30th, aged 76. The deceased, who was born at Brighton in 1837, was the second son of Mr. W. Willett, and his mother a daughter of the late Mr. William Verrall, of Lewes. He was educated professionally at St. Bartholomew's Hospital, becoming M.R.C.S. Eng. in 1859. He was admitted F.R.C.S. in 1862. During the last twenty years of his career he took a considerable part in the administration of its affairs. He was twice a member of Council, and vice-President. In 1897 he delivered the Bradshaw lecture at the College. Other institutions with which he was connected were Queen Charlotte's Hospital, St. Luke's Hospital for Lunatics, the Foundling Hospital, and the Evelina Hospital for Children. He was a member of the board of management of the Metropolitan Convalescent Institution, and one of the court of directors of the Royal Sea-Bathing Hospital at Margate. Further work done by him was as examiner in surgery to the University of Cambridge and the Royal College of Physicians of London. King Edward's Hospital Fund for London was another body indebted to him for much excellent work. He was a member both of its general council and also of its distribution committee, and in connection with the latter he acted as a hospital visitor. He was a member of the British Medical Association, and was vice-President of the Section of Surgery at the annual meeting in London in 1895. As an operating surgeon he was conscientious and painstaking in the highest degree, and he was to a great extent a pioneer in the matter of the treatment of deformities by operative measures. Mr. Willett married, in 1867, Rose, daughter of Sir George Burrows, Bt., F.R.S., physician in ordinary to Queen Victoria, and leaves five sons and two daughters to mourn his loss.

REVIEWS OF BOOKS.

DISEASES OF THE SKIN. (*a*)

In writing a new work on any speciality designed for students there are two pitfalls to be guarded against—overloading with detail, especially debatable theories, and incompleteness, particularly with regard to treatment. To a certain extent a text-book of this nature must lay down the law; in other words, it should guide the learner along the intricate paths of diagnosis and show him the way with no uncertain lead. We have pleasure in stating that, after a careful perusal of Dr. Walsh's handbook, we can confidently recommend it to those desirous of obtaining a working knowledge of the principles of practical dermatology in the shortest time. "There is no royal road" to this speciality, as the author aptly remarks in his preface, for it is only by careful clinical observation and comparison that the student can become proficient in diseases of the skin. With Dr. Walsh's classification, which is one based on practical convenience, we can take no exception, except to the inclusion of lupus erythematosus among the new growths, for ulerythema is more generally regarded as being allied to the toxic erythemata. The modern view is adopted of eczema—the touchstone of a dermatological text-book—that it is essentially a symptomatic response to some irritant, whether acting from within or from without. Here, and also in the chapters on psoriasis and rosacea, we find expression given to the author's well-known observations upon the connection between chronic and recurrent dermatoses and certain forms of cardiac disease.

The treatment of each disorder is succinctly described, and numerous valuable formulæ are given for lotions and ointments. The use of the newer physical and chemical agents, such as Bier's hyperæmic method, X-rays, radium, carbonic acid snow, etc., is given in the appropriate place, though we do not find mention of ionisation, which has given good results in many skin affections. This and a few minor omissions will doubtless be remedied in the next edition. A good account is given of the Wassermann test and the use of salvarsan in syphilis. The number of misprints is remarkably few, the most important being "metin" for "luetin" on pp. 269, 270, and "irrigation" for "irritation" on p. 102. We have nothing but praise for the excellent photographic illustrations, which are "telling" in every instance. Finally, the publishers are to be congratulated upon the handiness and clearness of type of a volume for which we predict a great future.

ST. BARTHOLOMEW'S REPORTS. (*b*)

This interesting volume of the St. Bartholomew's Hospital Reports opens with an appreciative memorial article on the late Sir Henry T. Butlin, whose death we all deplore. Butlin had been connected with St.

(*a*) "Diseases of the Skin: A Handbook for Students and Practitioners." By David Walsh, M.D.Edin., Senior Physician, Western Skin Hospital: President of the New London Dermatological Society. Pp. xiv. and 298, with 29 illustrations. London: Bailliere, Tindall and Cox. 1913. Price 6s. net.

(*b*) "Saint Bartholomew's Hospital Reports." Edited by H. Morley Fletcher, M.D., and W. McAdam Eccles, M.S., F.R.C.S. Vol. XLVIII. 8vo. pp. xxix, 234 and 187. London: Smith, Elder and Co. 1913.

Bartholomew's since 1871, when he was appointed one of the Surgical Registrars, after which he successively filled the offices of Assistant Surgeon, Staff Surgeon, and lastly, since 1902, Honorary Consulting Surgeon. Well may St. Bartholomew's mourn the loss of her great son. Dr. F. W. Andrews is responsible for an interesting paper on the age incidence of intracerebral hæmorrhage, in which he shows that this condition begins to assume serious proportions at an age a little below 50 years. The apparent maximum incidence is at the middle of the sixth decade of life, but if due correction is made for the age distribution of a population the liability of the individual to this form of death increases steadily up to old age. We wonder is it to be looked on as a sign of the times that only one-third of the papers in this volume deal with medicine, the other two-thirds of the papers being surgical. The surgical papers, however, are of great interest, not only to the surgeon but to the physician, especially that by Mr. Vick on 100 cases of appendicitis, and that by Mr. Kerr on lateral sinus thrombosis. The latter part of the volume contains the usual statistical information of the hospital work. We must again deplore the paucity of the information supplied from the department of anæsthetics, only one page being given to the analysis of the 9,565 administrations. No death is recorded from this department during the year, a really remarkable achievement.

CLINICAL MEDICINE. (a)

THIS volume is an epitome of ways and means of detecting disease by clinical and laboratory methods of investigation. It is, in fact, an exposition of what we may call the *natural* way of approaching the subject, bearing in mind the time-honoured maxim that medicine is essentially a science of observation.

A patient comes to us complaining of *symptoms*, and it is for us to ascertain their significance and to find out what is behind them. The ultimate diagnosis is arrived at as a matter of course, but the first and immediate object is to procure trustworthy data.

Why the author should dedicate his work to " junior practitioners," is not too obvious, because, as a matter of fact, it is the senior practitioner who stands to gain most by refreshing his methods of investigation. So much of the valuable information herein contained must be vaguely new to men qualified more than ten or fifteen years ago, that without its help the latter must " wallow in ignorance " of the progress of diagnostic science.

One thing cannot but strike us, viz., the immense service rendered by X-ray observation in many diseases of internal organs—heart, lungs and pleura, and stomach, etc. We might, however, take exception to some of the results in regard to the stomach, because there is every reason to believe that gastric ptosis and deformation are not infrequently artificial, due, it may be, to the weight of the bismuth emulsion employed for purposes of definition. This is a point that has of late received a good deal of attention abroad, especially in France, where surgeons seemed to be agreed that the data afforded by X-rays in diseases of the stomach require to be accepted subject to caution.

Interesting as the results of radiographic examination may be in pleurisy, pericarditis, etc., their value is, speaking generally, merely scientific, since but rarely can the method be brought to bear in private practice, with which alone the " junior practitioner " is concerned.

We are surprised to find no mention of Meyer's delicate phenolphthalein test for blood in liquids and of Florence's pyridine zinc acetate test for urobilin, since these present many advantages over the classical reactions.

We can cordially recommend this work to all and sundry. It is invaluable as a work of reference for the practitioner confronted by a difficult case, who needs coaching for a further scrutiny. For the student it is the necessary complement of ward work and direct observation. It is copiously and appropriately illustrated, and no expense has been spared in the matter of colour plates when the nature of the subject rendered this desirable.

ELECTRO-THERAPEUTICS. (a)

DR. HUMPHRIS has written a very useful book. There are many English manuals on the uses of electricity in medicine, but Dr. Humphris scarcely trespasses on their grounds. In the preface the author states that his volume is in no sense a text-book on electrotherapy, that his aim is to convey clear information as to some useful form of electrotherapy. All the facts narrated are, he emphasises, based on personal experience. A perusal of the book confirms these statements of its author. None of the physics of electricity which we are accustomed to find fully described in medical works on electricity are mentioned here. But, on the other hand, we find fuller directions as to the methods of employing electricity than we are accustomed to find in such manuals. Dr. Humphris is an enthusiast on the uses of static electricity, which has been so long neglected in our damp climate. Several practical methods of overcoming this drawback are metioned as having answered the test of experience. Illustrations of the various static modalities accompany the text. Nowhere do we remember to have seen so many useful diagrams accompanying the complete directions as to the means of application of the breeze, the brush, the spark, the static induced, and the wave current. We point out a slight error: in Chapter VIII., on the static induced current, it is stated in the text that "the wave current has already been described." We find, however, that the wave current is described at length in the succeeding Chapter IX. Electric light baths, thermo-penetration, and the high candlepower lamp, are described in other chapters. Very little is said about the value of the high-frequency current, as Dr. Humphris uses that current in comparison but rarely.

The second part of the book deals with various diseases and symptoms, such as pain, sciatica, rheumatism, lumbago, diseases of the alimentary canal, and enlarged prostate. The last methods of treatment of these troubles are described in detail, with illustrative cases.

A useful glossary and index complete the volume. The author is to be congratulated on having produced a book of so much practical value in so small a compass.

CONJUGAL HAPPINESS. (b)

THERE is little doubt that a fuller knowledge by the general public of the causes leading to happiness or the reverse in marital life would benefit not only those who are contemplating marriage or who are married but also their offspring and the race in general. We agree with the translator of the book before us that it is not one to be " placed in the hands of the young in its entirety," but its appearance may be welcomed by the class of the community above-mentioned. In its pages the author discusses fearlessly and plainly every factor that can possibly interact upon marital happiness, and he intends it to be a handbook of matrimony designed " quite as much, nay, even more, for those who intend to set their course for the port of matrimony as for those who have already reached it." To pessimists who deny the existence of happy marriages Dr. Loewenfeld replies that the rules laid down as to the relation of desires to happiness of any kind apply, generally speaking, to conjugal happiness as well. It is an old saying that "Les mariages se font au ciel, et se consomment sur la terre," but in order that this consummation may be effected it should not be left, as is so often the case, to blind chance to lead the way. The attainment of the priceless treasure of conjugal happiness will, surely, be facilitated by enlightening the contracting parties as to its manifold sources and as to the means to be taken to avoid the numerous pitfalls that beset the unwary. With regard to the sexual enlightenment of the young the opinion of the author may be gathered from the following: "As the present-day opinions in competent circles are agreed that even children of both sexes ought to be enlightened in these matters to a certain extent, the information being adapted to the comprehension at different ages and gradually widened in scope." In short, every principle of conduct for the guidance of the sexual life is discussed with restraint and common-sense, and, at the same time, other factors, such as religion, occupation, social status, finance, etc., are fully considered from their respective standpoints. We have pleasure in confidently recommending this book as a safe guide for the married or those about to marry.

(a) " Clinical Medicine, a Manual for the Use of Students and Junior Practitioners." By Judson S. Bury, M.D., F.R.C.P., Consulting Physician to the Manchester Royal Infirmary. 3rd ed. London: Griffin and Co, Ltd. 1912.

(a) "Electro-therapeutics." By Francis Howard Humphris. Pp. 243. London: Edward Arnold. 1913.

(b) " On Conjugal Happiness: Experiences, Reflections and Advice of a Medical Man." By Hofrat Dr. L. Loewenfeld, Munich. Translated from the 3rd ed. by Ronald E. S. Krohn, M.D.Lond., M.R.C.S., L.R.C.P. Demy 8vo., pp. 293 + xvi. Cloth boards. London: John Bale, Sons and Danielsson, Ltd. 1912. Price 7s. 6d. net.

THE CARE OF OLD AGE. (*a*)

The question asked in Ecclesiastes, "Why shouldest thou die before thy time?" is one that has interested many, but still remains as much of a mystery as ever. Indeed, the very meaning of the question is not yet definitely agreed upon, for though many are ready to accept the biblical three score and ten years as the normal life of man, there is much evidence for believing that this is an under-estimate. For the solution of the problem there is, perhaps, a greater mass of statistics than there is on any other subject, but these statistics cannot yet be used to give a final answer to the question. Till preventive medicine has succeeded in preventing preventable disease, and till the human body is saved from the many injuries that such disease inflicts, it is difficult to formulate what is normal old age. Metchnikoff, in his work on the prolongation of life, has put forward a fascinating hypothesis on this subject, based on the idea that a man is as old as his arteries, and that the age of his arteries largely depends on the poisons that damage them during life. His explanation of the generation of these poisons, and of the means of avoiding them, is not proven, and is probably not complete, but it is a good working hypothesis, and evidence seems to be accumulating in support of it. So long, however, as preventable diseases can scar and and sear the human frame, Metchnikoff's ideal is unattainable, and we must be content to try and preserve in health those who show signs of the wear and tear of life. Dr. Saundby has studied some of those conditions which present special features in old persons, and gives us admirable rules for the prevention and treatment of such. The book is interesting, and will well repay perusal.

LITERARY NOTES.

We have been favoured with advance proofs of a set of drawings of King's College Hospital, reproduced in photogravure from the originals by Hunslip Fletcher. The present sketches are in series with the admirable etchings of Guy's Hospital, by the same artist, which were noticed in these columns. Now that King's College Hospital is being removed from its ancient site, Mr. Fletcher's pictures have a special interest. The subjects chosen are (1) the front of the hospital, (2) the fine old staircase, and (3) the chapel. We are sure that King's men, past and present, have only to know of these beautiful pictures of their *alma mater* to purchase them freely. The publishers are Messrs. W. H. Benyon and Co. of Cheltenham.

No European health resort can compete with the famous spa of Harrogate, with its eighty springs, in the variety, and richness in mineral constituents of its waters. We have received a copy of the presidential address delivered before the Yorkshire Branch of the British Medical Association by Dr. Charles Gibson, J.P.,, on "A Plea for Harrogate and other English Health Resorts." There is no better equipped bathing establishment in the world than Harrogate, which might well be termed a family spa, and there is little doubt that if the famous health resort were better known on the Continent, and its merits properly appreciated, foreign medical men might recognise its advantages and send their patients in legions. Radioactivity as a chemical property of water is gradually becoming more understood, and this peculiar quality belongs to certain of the springs at Harrogate.

MEDICAL NEWS IN BRIEF.

Non-Panel Doctors.

It is reported that the London Medical Committee has decided to recommend the formation of an Association of Non-Panel Doctors for the County of London, who will not accept service under the Insurance Act unless the following amendments are incorporated in the Act:—Free choice of a doctor; an income limit; no one section to have a permanent majority on any Insurance Committee; and medical discipline to be in the hands of the Medical Committee.

In many parts of London there are already local non-panel societies, and the London Medical Committee will act as the central co-ordinating body. Communications should be addressed to the Secretary of the London Medical Committee at 45 Welbeck-street, W.

Model Dwellings and Infant Mortality.

The annual meeting of the Metropolitan Association for Improving the Dwellings of the Industrial Classes was held last week at 1 Pancras Square, Mr. Julian Hill presiding. The report showed that among the occupiers of the Association's 14 blocks of dwellings in various parts of London the rate of mortality was 12.57 per 1,000. In the entire metropolitan area the rate was 13.6. The deaths of occupiers' children under one year were at the rate of 76 in every 1,000 births, while those in the entire metropolis were at the rate of 91 per 1,000. The births were at the rate of 20.9 per 1,000 of the whole population of the dwellings, that for the whole metropolis being 24.5.

Apenta Water in West Africa.

Prof. Dr. Kulz, German Imperial Government Physician, Cameroons, has just reported his experience in West Africa of the aperient Apenta Water. He remarks that he has always given the preference to it in the West African tropics on account of its many advantages, especially in hot climates, as it is here that the European is predisposed to suffer from constipation, partly because of the loss of fluid from the skin, partly by change of diet, and partly as a sequel to the most prevalent of tropical maladies—malaria. He testifies that Apenta has proved itself a mild but reliable aperient, free from unpleasant after effects, and one which patients take readily; and as the water has been found to bear well the heat of the tropics, it is one of its great advantages.

Free Lectures to Medical Men and Students.

A course of ten lectures up "Electrocardiography and Heart Sound Records" will be given by Dr. Thomas Lewis at University College Hospital Medical School, at 11 a.m., on Tuesdays and Fridays of each week, commencing Friday, July 25th. The lectures will include anatomical demonstrations of the latest

---

(*a*) "Old Age, its Care and Treatment in Health and Disease." By Robert Saundby, M.D.Edin. 8vo. pp. viii. and 312. London: Edward Arnold. 1913.

discoveries in the anatomy of the heart, and full and illustrated descriptions of the several disorders of the cardiac mechanism (sinus arrhythmias, extra-systoles, paroxysmal tachycardia, heart-block, auricular fibrillation and alternation). Descriptions and demonstrations of the apparatus used for electro-cardiographic purposes, normal heart sounds, heart sounds in mitral stenosis, and other clinical conditions will be given. These lectures are free to all qualified medical men and medical students on presentation of visiting cards.

Small-pox in New South Wales.

Telegrams from Sydney report a mild epidemic of small-pox, thirty persons having been placed in quarantine. None of the cases, however, are of a serious character. Two factories have been closed, and free vaccinating depôts have been established. Some of the steamship companies are insisting upon outgoing passengers being vaccinated.

University of Oxford.

The following degrees have been conferred:—

M.Ch.—E. L. Pearce Gould, Christ Church.

B.M.—N. F. Hallows, Keble; A. L. Pearce Gould, Christ Church; D. B. I. Hallet, University; W. H. Ogilvie and F. A. Hampton, New College.

University of Durham—Faculty of Medicine.

The following degrees were conferred during June, 1913:—

Doctor of Medicine.—Wilfred Barkes, M.B., B.S. Durh., George E. Lloyd, M.B., B.S.Durh., George C. M. M'Gonigle, M.B., B.S.Durh., Matilda A. Sinclair, M.B., B.S.Durh.

Doctor of Medicine for Practitioners of Fifteen Years' Standing.—James W. Alexander, M.R.C.P. and S., L.F.P.S.Glas., Michael B. Foster, M.R.C.S., L.R.C.P., D.P.H., James M. Handy, L.M. and S. Ceylon, Edward T. Macintyre, L.R.C.P. and S., L.F.P.S.Glas., L.M. and S.Ceylon, Richard Price, L.R.C.P. and S., L.F.P.S.Glas., Reginald C. Tweedy, M.R.C.S., L.R.C.P.

Bachelor of Medicine (M.B.).—Edgar Babst, Robert E. Bell, Garfield Carse, Harold Fairclough, Ah Chit Jap, M.R.C.S., L.R.C.P., Robert L. Kitching, George E. W. Lacey, Claude W. Morris, M.R.C.S., L.R.C.P., Nora Murphy, Carinna A. B. O'Neill, Edward Phillips, John L. Pringle, Cedric O. Shackleton, James S. Soutter, M.R.C.S., L.R.C.P., Gordon S. Woodman.

Bachelor of Surgery (B.S.).—Edgar Babst, Garfield Carse, Harold Fairclough, Ah Chit Jap, M.R.C.S., L.R.C.P., Robert L. Kitching, George E. W. Lacey, Claude W. Morris, M.R.C.S., L.R.C.P., Nora Murphy Carinna A. B. O'Neill, Edward Phillips, John L. Pringle, Cedric O. Shackleton, James S. Soutter, M.R.C.S., L.R.C.P., Gordon S. Woodman.

Bachelor of Hygiene (B.Hy.) and D.P.H.—Ernest E. Norman, M.B. B.S.Durh.

Licence in Dental Surgery (L.D.S.).—William Hutson.

Conjoint Examinations in Ireland.

The following candidates have passed the Preliminary Examination of the Royal College of Physicians and the Royal College of Surgeons, June, 1913:—

D. J. Baldwin, A. H. Boyd, A. J. Crean, M. Donohoe, G. E. Evans, W. Fielding, W. Flynn, S. A. Gailey, Miss Ella Gleeson, W. F. Hughes, M. J. Hunt, Miss C. E. Kyle, A. F. Mallon, A. McCambley, R. G. C. McCullagh, E. D. Nolan, R. V. O'Connor, M. J. O'Riordan. Miss H. G. Rea (with Honours), P. J. Sheerin, A. A. Townsend, S. T. Wills.

Third Professional Examination, June 1913.—A. P. Adams, S. Barron, W. P. Cooney (Honours), J. Dwyer, H. Fitzgibbon, E. G. Foley, S. E. Gordon, J. W. E. Graham, E. N. H. Gray, O. K. Kerrigan, M. J. Loftus, W. G. McConnell, M. Moran, T. O'Donoghoe, L. S. O'Grady, G. M. C. Powell, L. M. Rowlette, R. A. Ryan, T. J. Ryan, T. H. Sarsfield, H. Scher, J. A. Watson.

Final Examination, June, 1913.—Patrick Ashe, John D. Cherry, Dominic F. Curran, Hugh A. S. Deane, James Devine, William St. Leger Dowse, Thomas R. Elliott, Thomas Grey, Aloyzius Humphreys, James Kearney, John Kelly, Francis P. Kennedy, Frederick J. M. Kennedy, William J. P. Lillis, Robert J. May, Patrick M. Moriarty, Edward J. B. Moynihan. Bartholomew J. Mullin, Daniel Mullin, Bernard Murphy, Charles McDonnell, Thomas B. Newman, Bernard J. O'Donnell, George E. Pepper, Robert Slaney, Trevor Seymour Smith, Geoffrey N. Smyth.

Trinity College, Dublin.

The following Candidates have passed the Preliminary Scientific Examination, Trinity Term, 1913:—

Botany and Zoology.—Alexander R. Barlas, Harry L. Parker, Joseph R. Brennan, Stanley C. Mitchel, Wilfred V. Pelissier, Edward D'A. McCrea, Robert W. Nesbitt, William P. Elford, George W. B. Shaw, Frederick C. Tucker, Frederick J. Smith, James H. B. Levis, Thomas Mulock Bentley, Isabella M. Alexander, James Beasly, Philip C. Cowan, Andrew H. Davidson, Michael Dippenaar, William A. Byrn, William H. Flinn, Henry J. Rice, Willem P. Lubbe, Dermot F. J. Falvey, Arthur G. Bewley, Arthur L. Gregg, David L. H. Moore, Arthur A. Morphy, John W. Duggan, Eric E. Tivy, Ethel M. Luce, Edward Evans, Daniel McElwee, John M. Semple, George F. Dobbin, Harry Banks, Richard M. B. Gamble, Kenneth Green, Thomas H. R. McKiernan, Philip S. Snell, James C. Campbell-Henry, Rita Henry, John B. McGranahan, Eric J. Lyndon, Percy C. Parr, Johannes C. Fouché, Frederick Gill, Henry Hanna, Joseph Power, George E. Healy, Jason G. Bird, George C. Ballantine, Herbert W. McAuliffe.

Physics and Chemistry.—Norman L. Bor, William H. Flinn, Alexander R. Barlas, Francis G. Pratt, George W. B. Shaw, Edward D. A. McCrea, Philip S. Snell, Charles P. Chambers, William R. Burns, Andrew H. Davidson, Paul C. Hallowes, James Beasley, Hirsh Brill, Paul H. S. Smith, Bryan A. MacSwiney, Margaret Wolfe, John R. Duggan, Marie A. Hadden, Alan G. Wright, Thomas E. Hill, Arthur L. Gregg, Willem F. Wicht, William T. Collins, Hastings H. Molloy, William J. Hamilton, Walter A. Bullen, Edward H. Powell, Millicent Hamilton-Johnstone, Cecil F. Kennedy, Thomas W. Panter.

Preliminary Scientific Dental.—Sidney A. Clark, William B. Parr.

Dental Anatomy.—Sidney G. Clark, William B. Parr, Louis E. Wigoder, Charles H. Herbert, Maurice L. Counihan, John H. J. Stuart.

Intermediate Medical (Part I.) Examination.—Robert C. B. Ramsay, Joseph W. Bigger, Alan F. Grimbly, Thomas J. Lane, Clotilda B. Bevis, Charles O. J. Young, Eric E. Beatty, Frederick J. Murphy, Francis W. O'Connor, Roland H. Graham, Eileen G. Glenn, John J. Keating, William Hunt, Samuel R. Hill, John T. Westby, Benjamin D. Merrin, Thomas W. Sweetman, Alfred H. Price, Thomas G. Roche. Purser Medal.—Joseph D. Bigger. Cunningham Medal.—Robert C. B. Ramsay.

Intermediate Medical Examination.—Part II.—Eugene J. MacSwiney (passed on high marks), Henry V. FitzGerald, Herbert Mitchell, Richard O'Kelly, William J. Dowling, Edmond Robinson, David S. Martin, Chistopher C. Albertyn, Sidney W. Fisher, Cecil G. Sherowitz, Edward Mannix.

Final Medical Examination.—Part II.—Surgery.—William J. Merrick, David L. McCullough, David H. Hadden (passed on high marks); William F. Evans, Henry B. F. Dixon, Mabel A. Dobbin, Hedley Boyers, John G. Butt, William F. Gibson, Charles P. Kelly, Charles O'Reilly, Eleanor Taylor.

Final Medical Examination.—Part II.—Midwifery.—William H. R. McCarter, Henry L. D'O. Duckwood, John T. McCullagh, Ralph J. R. Mecredy (passed on high marks); Joseph A. Quin, John D. Oliver, William Foot, George B. Hadden, Rupert C. Lowe, Hawtrey W. Browne, Joseph C. A. McCalden, Charles P. Kelly, Herbert E. Murray, Thomas V. Oldham.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THE STATUS OF THE MEDICAL PROFESSION IN ONTARIO.

It is reported that the Ontario Government will appoint a Commission to consider the status of the medical profession in Ontario, the condition of medical education, the claims of the various medical schools to public support, and the demands of certain new schools to recognition as legitimate practitioners.

Dr. K. W. (Kent).—The "Zeistic" theory of the production of pellagra appears now to be superseded owing to the discovery of the *role* played by the biting-fly *Simulium* in its ætiology. More details still require to be worked out in this connection.

THE LATE SIR JONATHAN HUTCHINSON'S WISH.

Sir Jonathan Hutchinson, we understand, expressed in his will the desire that upon his gravestone should be inscribed the words:—"A man of hope and forward-looking mind."

"Ne Plus Ultra" (Hendon).—The value of a degree in science to a medical man depends a good deal upon his future line of work. Many consulting physicians hold such degrees and it is generally acknowledged that the possession of the B.Sc. or the D.Sc. stamps its owner as one who has done some good original scientific work.

SAFETY FROM LIGHTNING.

To the Editor of The Medical Press and Circular.

Sir,—Safety from lightning is easily secured, says the "Scientific American Journal," by putting on rubber over shoes and standing so your clothing does not touch anything.

I was rather surprised that no mention was made of this in the paper on deaths from lightning that appeared in your columns a few weeks ago.

Yours very truly,
J. E. Burton.

SHAMMING ILLNESS UNDER THE INSURANCE ACT.

One of the serious effects of hurried legislation is shown by a large section of the public, now that they are entitled to free medical advice, 75 per cent. of whom are reported to be receiving medical treatment under the Insurance Act, although in no need of treatment.

Appointments.

Fawcitt, R., M.B., Ch.B.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Broughton-in-Furness District of the county of Lancaster.

Griffiths, Philip Rhys, M.B., B.S.Lond., Referee under the Workmen's Compensation Act, 1906, for the County Court Circuit, No. 24, to be attached more particularly to the Cardiff and Barry County Courts.

King, W. G., Colonel, I.M.S., Lecturer in Applied Hygiene of the Tropics to King's College.

Lloyd, Bertram A., M.B., B.S.Lond., F.R.C.S.Eng., Surgeon to the Out-patients at the Queen's Hospital, Birmingham.

McClelland, R. S., M.D.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Pontyberem District of the county of Carmarthen.

Metcalfe, James, M.D.Brux., L.R.C.P. and S.Edin., Honorary Physician in Charge of the X-Ray and Electrical Department of the Prince of Wales's General Hospital, Tottenham, N.

Monro, Thomas Kirkpatrick, M.D., C.M.Glasg., Professor of Practice of Medicine in the University of Glasgow.

Mowat, Harold, M.D.Edin., Physician in Charge of the X-Ray and Electrical Department at the Metropolitan Hospital.

O'Brien, W., M.B., Ch.B.N.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Aughrim District of the county of Wicklow.

Sinclair, J., M.D.Durh., M.R.C.P.Lond., M.R.C.S.Eng., Chief Medical Officer to the Post Office.

Steele, Russell Vyvyan, M.B., B.S.Durh., House Physician at the West London Hospital.

Vesselovsky, Victor, M.R.C.S., L.R.C.P.Lond., Resident Assistant Anæsthetist to St. Mary's Hospital.

Vacancies.

Worcester General Infirmary.—House Physician. Salary £120 per annum, with board, residence, and washing. Applications to William Stallard, Secretary, Worcester Chambers, Pierpont Street, Worcester.

North Wales Counties Asylum, Denbigh.—First Assistant Medical Officer. Salary £275 per annum, with furnished apartments, board, attendance, and washing. Applications to the Medical Superintendent.

University of London, King's College.—Demonstrator in the Department of Anatomy. Salary £100 per annum. Applications to the Secretary of the College.

Whitehaven and West Cumberland Infirmary.—Resident House-Surgeon. Salary £120 per annum, with board and lodging. Applications to H. J. Bewlay, Secretary.

Southwark Union, London.—Assistant Medical Superintendent. Salary £150 per annum, with board, lodging, and washing. Applications to Sydney Wood, Clerk, Union Offices, Ufford Street, Blackfriars, S.E.

Canterbury Mental Hospital, Canterbury.—Assistant Medical Officer. Salary £160 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Peamount Sanatorium, Hazelhatch, Dublin.—Resident Medical Superintendent. Salary £400 per annum, with house and light included free. Applications to Hon. Secretary, 59 Fitzwilliam Square, Dublin.

County Asylum, Whittingham, Preston, Lancs.—Assistant Medical Officer. Salary £200 per annum, together with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Down District Lunatic Asylum.—Junior Male Assistant Medical Officer. Salary £130 per annum, rising by annual increments to £150, with full rations, etc. Applications to the Resident Medical Superintendent. (See advt.)

Births.

Evans.—On July 3rd, at Floriana, Malta, the wife of Major C. R. Evans, R.A.M.C., of a son.

Heywood.—On July 5th, at Cornermead, Newbury, to Dr. and Mrs. W. B. Heywood—a daughter.

Woodward.—On June 28th, at Kingston Bagpuize, Abingdon, to Dr. and Mrs. Woodward—a son.

Marriages.

Langmead—Gray.—On July 3rd, at St. Ethelburga's, Bishopsgate Within, Frederick Langmead, M.D., F.R.C.P., of 53 Queen Anne Street, Cavendish Square, W., son of Mr. and Mrs. William Langmead, Sunnyside, Littlehampton, to Olive, youngest daughter of the Rev. Thomas T. Gray, Senior Fellow, Trinity College, Dublin, of 35 Trinity College, Dublin, and Carn Park, Co., Westmeath.

McMullan—Wells.—On July 1st, at St. Agatha's Church, Brightwell, Dr. George McMullan, of Wallingford, to Muriel Watkins, second daughter of Mr. and Mrs. Henry Wells, of Sotwell Hill, Wallingford.

MacNalty—de Wesselow.—On July 1st, at St. Martin's Church, Epsom, Arthur Salusbury MacNalty, M.D., M.A., M.R.C.S., eldest son of Dr. F. C. MacNalty, of Winchester, to Valentine Dorothea Vaughan, only daughter of tho late Rev. C. H. Simpkinson de Wesselow and of Mrs. Simpkinson de Wesselow, of Ebbisham House, Epsom.

Powell—Barrass.—On July 2nd, at St. Peter's, Harrogate, Major John Powell, R.A.M.C., Egyptian Army, Cairo, eldest son of the late John Clark Powell, Blackrock, Co. Dublin, and Mrs. Powell, Tentore, Bexhill, to Elsie Kate Barrass elder daughter of the late Matthew Barrass, Killingworth, Northumberland.

Rivington—Willans.—On July 5th, at St. George's Church, Hanover Square, London, Harold Victor Gibson, youngest son of the late Walter Rivington, Esq., B.A., M.B., M.S., F.R.C.S., to Charlotte Mary Eveleen (May), only daughter of the late John W. Willans, Esq., J.P., of Leeds.

Stansfeld—Squire.—On July 3rd, at Holy Trinity Church, Leicester, Alfred Ellington Stansfeld, M.A., M.B., M.R.C.P., of 48, Bryanston Street, London, W., eldest son of Alfred Stansfeld, of London, to Helen Mary, daughter of Samuel and Annie M. S. Squire, of 1 Salisbury Road, Leicester.

Deaths.

Cross.—On June 30th, at Calstock, Moss Lane, Pinner, John Cross, M.D.Cantab., formerly of Regent's Park, London.

Great Rex.—On June 30th, in a Nursing Home at Stoke-on-Trent, Adophus Burnell Great Rex, M.D., J.P. for county of Staffordshire, of Harecastle House, The Avenue, Kidsgrove, Staffordshire, aged 72. In practice for over fifty years at Kidsgrove.

Kloster.—On June 28th, at Kamaran, Arabia, Olaf Kloster, M.B., C.M.Edin., in his 47th year.

Rees.—On June 22nd, at Brynderw, Llanwrtyd Wells, suddenly, of syncope, William Thomas Rees, M.R.C.S., etc., in his 51st year.

Mariette.—On July 5th, at Peppard Common, Ernest Mariette, M.B.Lond., late of Plymouth and Colwyn Bay, eldest son of the late Prof. Alphonse Mariette, aged 52.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, JULY 16, 1913. No. 3.

NOTES AND COMMENTS.

The Sackville Probate Verdict and "Undue Influence."

ENGLISH law is founded upon an endless accumulation of precedents. So far as the principle of "undue influence" in the obtaining of gifts or legacies is concerned, an important decision has been added in the recent probate suit brought by the Scott family against Lord and Lady Sackville. The disputed will left to Lady Sackville cash and property to the value of half a million of money. In addition, large sums of money were also given to her by the testator, the late Sir John Scott, during his life. Undue influence and fraud were alleged against Lord and Lady Sackville. The allegation of fraud appears to have rested on a flimsy foundation, and was practically dismissed by the judge. The other point, that of undue influence, was also unsustained, as the terms of the will were upheld, and a verdict returned in due course to that effect in this remarkable suit. With the general aspects of the case we are not, as a medical journal, specially concerned. The point of "undue influence," however, has a bearing upon the medical profession that it may be well to discuss briefly. So far as the term was popularly understood it seemed to deal with those cases in which persons, not being family relatives to a testator, had during life obtained such an ascendancy over the latter as to secure either considerable gifts during life or legacies after death. In various ways the special provision seemed of considerable value in the protection of the natural interests of relatives, and in securing a just disposition of property. The Scott-Sackville trial, however, shows that it is quite possible for a person, not being a family relative of a deceased testator, to receive large gifts during life and still larger sums by way of legacy without overstepping the limits of due and legitimate influence.

The Medical Bearing.

THIS decision affects members of the medical profession, inasmuch as from time to time valuable gifts and valuable legacies accrue to them from patients. In the past certain lawsuits brought by the relatives of such deceased donors and testators have been decided in their favour. As a result it has been a fairly well accepted view amongst medical men that it is exceedingly unsafe to accept such gifts and unwise to regard such legacies as stable and valid. The Sackville decision, however, appears to have thrown a fresh complexion upon the legality of such transactions. In that case a lady, not being a family relative of deceased, has received large sums of money both before and after the testator's death, with the sanction of a British jury, who took twelve minutes only in arriving at their verdict. The practical conclusion seems to be that a medical attendant, who obviously has it in his power, as a rule, to render solid and, it may be, incalculable services to the donor or testator, may in future regard the acceptance of gifts or legacies with a greater sense of security than has been heretofore possible. At the same time, it is wise to remember the saw that circumstances alter cases, and that a jury may be inclined to adopt a different standard in the case of a medical attendant from that applied by them to a society dame. From a psychical standpoint it is open to doubt whether a fully sane and responsible person should desire to leave the bulk of his fortune away from his blood relations. In most civilised countries an alien disposition of the kind is forbidden by law. Why should it be otherwise in the United Kingdom?

Tuberculosis in the Isle of Wight.

THE Isle of Wight, famous for its natural beauties and for its healthfulness, is not a place one would associate with consumption. Yet the annual report of the Medical Officer, Dr. J. Pixton Walker, shows that 225 cases were notified during the year 1912. He is able to add, however, the reassuring statement that the figures are 45 below the average of England and Wales for a population of similar size. The total deaths from tuberculosis for the year were 129, of which 102.4 were pulmonary and 26.6 other tuberculous disease. It is satisfactory to note that the returns for 1912 are little more than half those for 1901—in the earlier period they were 147 pulmonary and 29 other forms, or a total of 176, against 78, 20; and a total of 98. The administration of sanatorium benefit has been commenced by the Isle of Wight County Insurance Committee. Until recently no arrangement had been made for the provision of hospital or dispensary treatment of sufferers from the disease. Domiciliary treatment, on the other hand, has been granted to a number of patients, this comprising medical attendance, medicines, medical appliances, tuberculin and extra food. The Committee has now taken advantage of the fact that the National Hospital for Consumption, at St. Lawrence, has become a recognised institution under the Insurance Act, and is prepared to accept 12 advanced cases at a charge of 10s. 6d. each per week, inclusive of laundry and extras. In considering the facts of tuberculosis in the island, it must be borne in mind that not a few sufferers are attracted thither by the healthfulness of the climate, and after a year's stay are classified as residents. For all that, it is to be deplored that so lovely a spot and so fine a climate should be fated to harbour any consumptives at all. The steady decrease of the disease in the Isle of Wight is most satisfactory, and highly creditable to the local sanitary administration, besides which it may be regarded as a happy omen of the ultimate disappearance of this preventable malady.

LEADING ARTICLES.

THE AMALGAMATION OF ST. GEORGE'S AND WESTMINSTER HOSPITALS.

An event of much significance to the hospital world generally is the amalgamation announced last week between the two famous London hospitals St. George's and Westminster. Both institutions have occupied sites of great and increasing value, a fact that is attested in overwhelming fashion in one instance, for the ground upon which St. George's Hospital stands has been sold for the enormous sum of £480,000, subject to some slight reservations in favour of the Duke of Westminster. The principles involved in this amalgamation have a significance far beyond their mere local application, and some deserve careful consideration in view of the manifold changes which the medical profession may be called upon to face in a somewhat near future. It has in former times been customary to locate the great general hospitals of the metropolis within a comparatively small central area. Whatever may be said in favour of that practice in the past, it is certainly not so definitely desirable under modern conditions of transit and City life. The rapid growth of London has surrounded the central area with the rapidly increasing zone of densely populated suburbs included in Greater London. The great central hospitals, therefore, become more and more aloof from the crowded suburbs; while, for the same reason, their patients are subjected to a polluted city atmosphere. At the same time the vast increase in land value prevents the extension of hospital premises to meet increased pressure upon space; whereas, on the other hand, the sale of valuable City sites would provide not only ample room, but a handsome margin of endowment for the purposes of the charity. As to the question of amalgamation, it goes without saying that an opportunity is thus afforded in most cases of effecting a considerable economy of management. The present state of the voluntary medical charities—not only of the metropolis, but also of the United Kingdom—is simply chaotic. Every such institution is a law unto itself as regards its internal laws, its finance, and its administration. A Government inquiry into the state of the voluntary medical charities would probably reveal many weak points that might be rectified with advantage to the medical profession and to the outside public, who provide the funds for carrying on the hospitals and furnish the patients to whom these institutions bring help and succour. Now that two great London hospitals have taken the enlightened step of amalgamating and of selling their central sites, it may be excusable to look for further progressive reforms in the same quarter. So rapidly have the views of practical men changed of late with regard to many of their professional relationships with the outside world that such questions as the remuneration of hospital staffs, the security of tenure, the multiplication of hospital appointments, the rate of promotion to senior posts, the nature of the necessary medical qualifications, the limitation of out-patient drudgery, and various other points that will readily occur to the minds of our readers, have, of necessity, been submitted to considerable revision. The question of the nationalisation of hospitals is in the air. It has been materially advanced by the introduction of the National Insurance Act, and there is much to be said in favour of the view held by some students of social problems that the only logical solution of the medical part of the national health problem will be found in some form of State administration of hospitals. In any case, the governors of St. George's and of Westminster Hospitals may be congratulated on the courageous way in which they have settled the momentous questions of sale of site and of amalgamation. The traditions of both these charities are ancient and honourable, and they have added many illustrious names to medical history and many notable contributions to medical science. It may safely be predicted that the present distinguished members of the honorary medical and surgical staffs will lose nothing in dignity or opportunity by the amalgamation of forces—especially now that the question of University life in London is approaching its inevitable settlement.

RESIGNATION OF THE STAFF OF A LONDON HOSPITAL.

The resignation of the whole staff of a London hospital is a matter that would arrest attention at any time. Coming as it does at a time of considerable unrest in the medical profession, such an occurrence is calculated to excite more than ordinary interest. The incident has taken place in connection with the Mount Vernon Hospital for Consumption and Diseases of the Chest, and the names of the honorary physicians and surgeons, some on the consultative and others on the active staff, are of a distinction that suffices to raise the matter to one of first-rate importance. The main, although apparently by no means the only, cause of this common resignation has been what is described as the arbitrary, and probably illegal, action of the management in the dismissal of two physicians from the Northwood Branch of the institution. The committee of management appeared to imagine they can act as sole arbiters of the tenure of contract with the members of the honorary medical staff—in short, that they can at any moment dismiss a physician regardless of the rules of the institution, or of the ordinary legal aspects attached to a contract of the kind. In this particular case the members of the staff are not the sort of men who will tamely submit to an injustice perpetrated on their colleagues any more than they are likely to raise an unnecessary complaint. The fact that they have resigned in a body might well give pause to the most arbitrary and irresponsible management. Indeed, the Secretary of the Hospital, Mr. Charles Johnston, has since written a letter to the *Times* putting forward some sort of a faint-hearted apology for the action of his committee. He admits the fact that two physicians at Northwood have been, as he delicately expresses it, "relieved of their duties." He impugns the accuracy of the resigning staff, however, in their description of this as a disciplinary measure, as the reference to a "summary dismissal" might imply. The explanation accorded by Mr. Johnston is that, owing to the impending sale of the site at Hampstead, the Northwood institution will in future be the only place available for beds, and it was felt that they should be under the care of the senior physicians. The board, according to this statement, considered themselves entitled to evict the Northwood physicians forthwith, in order presumably to prevent any possibility of future friction with their seniors. Surely, the right way would have been to ascertain the views of the medical staff as to any readjustment of service that might be required to meet the altered conditions. The most grotesque part of Mr. Johnston's letter is the suggestion that, as the Northwood beds will be greatly increased in number at a later date, the two junior physicians would be invited to return in the ordinary course of things. If the rules of the hospital admit the appointment of physicians in so lax a way as he suggests, they must stand in need of drastic revision. There is not a word of explanation of the extraordinary conduct of the committee in proceeding to the extreme step of dismissal without granting the request of the ordinary medical staff to confer with them upon the subject. There is a general denial of the request of the staff that "other matters" might be discussed at the same time. "The committee regret," he adds, "that so many members of the medical staff have appended their names to the letter of resignation, some of whom have done so without a full knowledge of the circumstances of the case." The latter insinuation does not mend matters, as it simply casts a gratuitous slur upon the medical signatories, whose names are a sufficient guarantee to their professional brethren that they would not lightly sign such a document as their letter of resignation. The truth of the matter appears to be that the committee is so inflated with a sense of its own dignity and importance that it has taken an arbitrary view of its powers, and has dismissed two members of its honorary staff in an unjustifiable, and probably also an illegal, manner. If the question be pushed to legal decision it seems not unlikely that they would come out of the matter in a somewhat sorry plight. The day when lay committees can ride roughshod over the ordinary rights of their medical staffs is fast disappearing. Happily, the powerful defence organisations of the medical profession have taken under their care the protection of the holders of unsalaried hospital appointments. Meanwhile the staff of the Mount Vernon Hospital have shown a good example of the way in which a dignified and decisive common protest should be lodged against the unfair action of a hospital management. Their joint letter of resignation addressed to the committee of the hospital will be found in our correspondence columns.

CURRENT TOPICS.

Duodenal Ulcer—A Personal Testimony.

The reports by medical men upon their own diseases are invariably instructive, if somewhat melancholy, for it is always helpful to have symptoms recorded by a trained observer. We publish elsewhere in our columns an interesting account, by Dr. Xavier Combes, of his personal experiences as a patient suffering from duodenal ulcer. The case-history is recorded with cold-blooded exactitude from the first moment in which matutinal epigastric pain was experienced down to the operation of posterior vertical gastro-enterostomy, which could no longer be postponed on account of recurring attacks of melæna of increasing gravity. It may be noted that the pain always coincided with stormy and rainy weather, while in hot weather the patient would enjoy periods of quiescence. The temporary relief of the pain by pressure and from the presence of food in the stomach coincides with the classic description of duodenal ulcer. Large doses of bismuth also caused the attacks to cease for a while. It is not known how atmospheric conditions influence the onset of the attacks, but such was the case with Dr. Combes. Like many another patient who postpones operation, it is only putting off the evil day, for it had to come, and, fortunately, it was completely successful. It is poor comfort to be told that one is "a splendid example of a typical duodenal ulcer," for our confrère, fearful lest any malignant change might have supervened upon his ulcer, could hardly help feeling anxious when informed that surgical measures were the only form of treatment. Dr. Combes is to be congratulated upon his excellent recovery, and also upon the succinct and accurate manner in which he has noted every symptom in his own case for the guidance of his fellow-practitioners.

Poisoning by Easton's Syrup Tablets.

Broadly stated, all forms of accidental poisoning demand careful inquiry with a view of their prevention by the State. Curiously enough the legislature is slow of action in such matters, for only recently, in spite of the long-continued requests and warnings of the Pharmaceutical Society, have such deadly hypnotic drugs as veronal been added to part one of the Poisons Schedule, while so simple a safeguard as the compulsory adoption of specially shaped bottles and packages for poisons has not been adopted. Many valuable lives are lost every year because the legislature has not dealt with this minor but nevertheless highly important detail of social legislation. An example of the apathy which refuses to learn from experience is the deaths which occur from time to time from accidental poisoning by Easton's syrup sold in tablet form. Children mistake the tablets for sweets, with results that are not infrequently fatal, as strychnia, one of the chief constituents of the syrup, is peculiarly fatal to those of tender years. It is surely not too much to ask that in view of the frequency of such accidents, Easton's syrup tablets should in future be packed in a three-cornered bottle with a bold poison label outside—or, better still, that responsible manufacturers should decline in future to sell Easton's syrup or other deadly drugs in tablets. So far as the syrup is concerned, it is readily dispensed in its liquid form, and its removal from the tablet lists would cause little inconvenience to the public, whereas, on the other hand, its retention constitutes an established danger. In a recent case at Huddersfield the Coroner remarked that similar occurrences were known to him.

The Importance of a Complete Examination of the Expectoration.

IT is a medical truism to state that failures in treatment are not seldom due to hasty or incomplete examination of the patient or to the omission to submit the blood or one of the secretions of the body to modern laboratory tests. In general practice it is often difficult to apply the refinements of bacteriological diagnosis in the sickroom; nevertheless, when this can be done the results will nearly always justify the extra trouble and expense. Some interesting cases were described by Dr. J. A. B. Hammond, of Shanklin (*a*), in which the importance is emphasised of a complete bacteriological examination of the sputum. The writer, in common with many practitioners, was content, up to two years ago, when having the expectoration examined, to know whether the tubercle bacillus were present or not, leaving it at that. A case occurred in his practice of a patient who was invalided home from India with signs of catarrhal pulmonary mischief, chiefly marked at the left apex. Repeated examination of the sputum for tubercle bacilli yielded negative results, but inoculated media gave an almost pure culture of the pneumococcus. An autogenous vaccine was made, and after seven injections had been given the symptoms and signs cleared up. In another case a lady presented every clinical sign of phthisis, and there appeared to be no doubt about the diagnosis, though the characteristic bacilli were not found. Inoculated media, however, showed the presence of large numbers of streptococcus longus, some pneumococci, and many micrococci catarrhalis. This case might well have been one in which tuberculin treatment would have been recommended, but the bacteriological examination of the sputum entirely negatived such a hypothesis. It is possible that many cases of suspected phthisis that do not react to tuberculin or other remedies might do so after injections of the appropriate autogenous vaccine.

The True Meaning of Sanatorium Benefit.

THE question as to what is exactly comprehended under the term "sanatorium benefit" under the National Insurance Act is one of considerable importance, both to the insured themselves and also to the medical profession. A thoughtful, if somewhat pessimistic, paper upon the subject was read the other day by Dr. Arthur Latham, at the Congress of the Royal Sanitary Institute at Exeter. The author doubted whether there was any district in England where there was an organised and coordinated scheme upon the lines of the Astor report in actual working order. It is true that the time is still short for the various local authorities to organise such schemes; but, on the other hand, it is poor comfort to be told that thousands of patients are receiving treatment at sanatoria when the utmost difficulty is often experienced, at any rate in London, to deal with the poor consumptive according to the original intention of the Act. Incurable tuberculous patients who have been refused admission into sanatoria might have been spared a good deal of disappointment by the use of some such term as "tuberculosis," instead of "sanatorium," benefit. The latter term has been made to include the provision of food, fuel, and clothing under its regulations. In this manner Public Health and Poor Law funds are being relieved, but the sanatorium benefit funds are becoming depleted. In consequence, the principal object of sanatorium benefit, the prevention of the disease, is being severely handicapped. Other speakers, who followed, maintained that the heart of the ideal scheme in fighting tuberculosis is the dispensary, which can be so organised that ample time can be given to every case. Under existing circumstances much importance is assumed by domiciliary treatment, and this can be so arranged that the general practitioner will be able to take his share in the scheme, for the whole ground cannot be covered in a comprehensive manner by Insurance Committees or dispensaries without the co-operation of the family doctor.

The Prevention of Puerperal Fever.

THE epoch-making researches of Semelweiss with regard to the incidence and prevention of puerperal fever have borne fruit by the further elaboration, since his time, of the principles of asepsis as applied to obstetrics. Nevertheless, in spite of every precaution, the parturient woman may become the victim of sepsis, which may confine itself to the pelvis or develop into the more alarming constitutional state of septicæmia. Happily, the latter event is fast becoming a thing unknown in our great lying-in hospitals, but now and then cases of puerperal infection occur in private practice, more especially where skilled medical aid has not been available at the time of delivery. An important effort has recently been made in Birmingham in connection with the prevention of infectious disease by the opening of a new ward to accommodate twenty-eight patients in the Birmingham and Midland Hospital for Women, which took place last week. Formerly, by arrangement with the City Council, two beds were reserved in the hospital for such cases, but the new arrangements will facilitate the treatment and the prevention of puerperal fever in Birmingham, where, it may be noted, the disease has been made notifiable. The new ward is quite isolated and self-contained, and it will be staffed by special nurses from the hospital staff.

Memorial to Sir Henry Swanzy.

IT is with satisfaction we learn that the citizens of his native city have taken steps to establish a memorial to the late Sir Henry Swanzy, and at an influential meeting held ten days ago, under the presidency of the President of the Royal College of Surgeons, the project was set on foot. One is too ready to think of a great surgeon, such as Swanzy, as if he were merely a great surgeon, and as if only the medical profession had a right to be proud of his achievements. This is a wrong attitude of mind. Not only is it the duty of the medical profession of the United Kingdom and the world to show its respect for what Swanzy accomplished in surgery, but it is incumbent on Ireland and Dublin to show their reverence for the memory of a great benefactor of his fellow-countrymen. In this spirit the leading representatives of the various interests and professions have gladly joined the executive committee for the purposes of the memorial. Fortunately, there is no difference of opinion as to the form the memorial should take. While the Royal Victoria Eye and Ear Hospital remains unfinished, Swanzy's life-work is incomplete.

Our Leaders.

IT is almost a truism that medicine to-day is run on more or less scientific lines. Science is our standard, and we are almost tired of the reiteration of the word. Yet in our community of scientists a strange paradox outstands. It is that professional leadership is often far removed from success in practice. The anomaly is so frequent and familiar

---

(*a*) *Guy's Hospital Gazette*, July 5th, 1913.

that we hardly notice it. It is certainly there and as certainly it should not be there. Bacon has been accused of many things, from embezzlement to Shakespeare. Whatever opinions we hold about these we can have no doubt that it is due to him that laymen are the real arbiters of a doctor's fate. He made inductive reasoning popular and with it the subversion of authority. Although he saw the danger of applying his method to things not physical his followers did not, and that is why a man who is out for popularity to-day can always gain a reputation. We do not specify the kind of a reputation, but to some men any reputation is better than none, especially when it includes pecuniary success. As long as we are servants of the public things will be as they are. To make sure that the best men reach the top we should have to hypothecate either an intelligent public or an entirely disinterested profession.

Roi Malgre Lui.

There are several obvious penalties attached to Royal birth. One of them is that the princes of the earth are only taken seriously in their capacity of being what they are. They are rarely allowed to do what they can. Medicine claims several Royal practitioners though only one of them, Duke Karl Theodor of Bavaria, attained any degree of success. He gave up his life to the charitable practice of ophthalmology to such effect that he was universally considered much more a surgeon than a prince. By sheer good work he left the cramped dignity of Royalty and became a man. He is the shining exception. The Queen of Greece's case is an example of the rule. She had a praiseworthy desire to help her country's sick soldiers, and went as a nurse to one of the military hospitals. Circumstances were too much for her. Sooner than ask their Queen for a drink of water the wounded men lay in thirst and loyal awe till some lesser mortal came along. So the Queen had to retire from active nursing and now substitutes patronage for personal service. It was the same long ago. James IV. of Scotland was an amateur dentist, and pursued his passion for the tooth, the whole tooth and nothing but the tooth, regardless of expense. The Royal cash accounts show expenditure on "turcases to take out teeth," and items of fourteen shillings "to ane fellow because the King pullit furht his tooth." James apparently practised dentistry only for amusement, and like Samson attained a reputation through manipulating the jawbones of asses.

The Forthcoming Oxford Ophthalmological Congress, 1913.

As already announced, the next meeting of the Congress will take place at Keble College, Oxford, on Thursday, July 17th, and Friday, July 18th, 1913. The members will meet informally at dinner at 7.30 p.m., in Keble Hall, Keble College, on Wednesday, July 16th. Members who propose to be present can be accommodated. A charge of 7s. 6d. *per diem* is made by the authorities for board and lodging in Keble College. The official dinner of the Congress will take place in Keble Hall at 7.30 p.m. on Thursday, July 17th, when the chair will be taken by Professor Sir William Osler, Bart., F.R.S. A discussion "On the Present Position of Ophthalmology" will be held at 2.30 p.m. on Friday, July 18th, at the Eye Hospital. It will be opened by the Master of the Congress, Mr. K. W. Doyne. Further details may be obtained from the Honorary Secretary, Mr. Sydney Stephenson, 33, Welbeck Street, W.

PERSONAL.

H.M. the King has been pleased to give directions for the appointment of Mr. Cyril Hartley Durrant, M.B. (Medical Officer), to be an Official Member of the Legislative Council of the Island of St. Vincent.

Sir Rickman J. Godlee has been re-elected President of the Royal College of Surgeons of England.

Mr. Harold Chapple, M.B., M.C.Cantab., has been appointed Obstetric Surgeon to Guy's Hospital.

Mr. W. H. Trethowan, M.B., M.S.Lond., has been appointed Orthopædic Surgeon to Guy's Hospital.

Dr. N. R. Phillips has been appointed Medical Superintendent of the County Asylum, Abergavenny.

Dr. G. H. Hunt, M.A., M.B., B.Ch.Oxon., has been appointed Fifth Assistant Physician to Guy's Hospital.

Dr. H. T. Depree, B.A., M.B., B.C.Cantab., has been appointed Honorary Anæsthetist to Guy's Hospital.

Dr. Stanley Wyard, M.D., B.S.Lond., M.R.C.P., has been appointed Pathologist to the Victoria Hospital for Children.

Mr. C. E. S. Jackson, M.B., B.S.Lond., F.R.C.S., has been appointed Surgeon to the West Norfolk and King's Lynn Hospital.

Sir Donald MacAlister, K.C.B., F.R.S., was the recipient last week of the Honorary Degree of LL.D. of Queen's University, Belfast.

Dr. Ralph M. Soames, M.B.Cantab., M.R.C.S., L.R.C.P., has been appointed Tuberculosis Medical Officer for the County of Surrey.

Mr. Evan Abraham Morgan, of Addison-road, Hove, physician and surgeon, left estate of which the net personalty has been sworn at £26,226.

Dr. F. S. Palmer, Physician to the West End Hospital, has been elected President of the West London Medico-Chirurgical Society for the ensuing year.

Among the recipients the other day of the honorary degree of LL.D. of the University of St. Andrews was Lieut.-Colonel Sir C. H. Bedford, D.Sc., M.D., I.M.S.

Dr. E. Graham Little has been re-elected a member of the Senate of the University of London by Convocation as a representative of the Faculty of Medicine.

At the last meeting of the Corporation of London the salary of Dr. F. J. Waldo, Coroner for the City and for the Borough of Southwark, was increased from £1,250 to £1,450 in recognition of his work in the City.

Mr. Charles Leedham Green, M.B., Ch.B.Birm., F.R.C.S., Surgeon to the Queen's Hospital, Birmingham, has been appointed Joint Professor of Surgery in the University of Birmingham in place of the late Professor Jordan Lloyd.

CLINICAL LECTURE
ON
THE TREATMENT OF GLAUCOMA, WITH PARTICULAR REFERENCE TO THE NEWER OPERATIONS. (*a*)

By SYDNEY STEPHENSON, S.O. (Oxon.)

THE treatment of glaucoma may be described as (*a*) first-aid, (*b*) surgical, and (*c*) palliative.

(*a*) FIRST-AID TREATMENT.

What has been called first-aid treatment may be required when the surgeon encounters a case of acute glaucoma, on which for one reason or another he is not prepared to perform iridectomy. For the temporary reduction of the intra-ocular pressure and its attendant manifestations several means are available. One of the latest is the subconjunctival injection of from five to fifteen drops of a 4.05 per cent. to 5.41 per cent. solution of sodium citrate, as advised by Dr. Martin H. Fischer (1), of the University of Cincinnati. The effects last for from three to six days or longer, and are accompanied, according to the experiences of those who have tried the method, by relief of all the subjective symptoms of glaucoma. The "colloid acidosis theory" of Fischer, upon which this method of treatment is based, has given rise to considerable interest in the United States. Very briefly, the eye is believed to become glaucomatous not because fluid is pressed into it, or prevented from escaping from it, but because it absorbs an increased amount of water, as the result of alterations in its colloidal condition.

Another way of relieving the intra-ocular pressure for the time being is by the performance of *posterior or equatorial sclerotomy*, a simple enough operation, in all conscience, and one well within the compass of the average practitioner. A narrow blade, such as a Graefe's cataract knife, is plunged meridionally into the sclera in the interval between the insertion of the superior and external recti muscles, or between the external and inferior recti, at a distance of at least 6 mm. from the visible edge of the cornea, so as to avoid the ciliary body. The cutting edge of the blade is directed away from the cornea. The blade is then turned upon its axis, to allow of the escape by its side of a little vitreous, and after having been once again turned into a meridional position, it is finally withdrawn from the eye. By pushing the ocular conjunctiva on the point of the knife before piercing the sclera, the operation may be performed, as it were, subconjunctivally.

Decompression is assured at all events for some days. As Dr. Louis Dor (2), of Lyons, has well said, in such cases, "equatorial sclerotomy is as urgent as the cutting of the rope of a hanged person."

The operation can be done without anæsthesia, general or local. Cocaine, indeed, helps but little, since the remedy is absorbed with difficulty, if at all, by a glaucomatous eyeball.

Pain, apt to be very severe in cases of acute glaucoma, may be relieved by the hypodermic injection of an adequate dose of morphine. Locally, physostigmine or pilocarpine should be instilled, and the addition of dionin hydrochloride (5 per cent. to 10 per cent.) often has an almost magical influence in calming pain, and may, indeed, allow morphine to be dispensed with.

(*b*) SURGICAL TREATMENT.

Ophthalmic surgeons are almost agreed that the best treatment of acute glaucoma is by iridectomy. (*b*) The results of that operation are very favourable. For example, Schmidt-Rimpler (3), who collated the results in 167 acute cases in the practice of seven Continental surgeons, found that improvement or arrest of the disease took place in 80 per cent. of the cases.

It is, however, quite otherwise as regards simple glaucoma. The point is brought out very clearly by Schmidt-Rimpler's Continental statistics (3). That observer collected figures dealing with 828 cases of glaucoma simplex treated by iridectomy from the practice of seventeen surgeons. Of that number, operation succeeded only in one-third (33.7 per cent.) and failed in two-thirds (66.3 per cent). It is obvious, too, that the *permanent* results would be smaller than that represented even by that exiguous figure. The Laska-Fuchs's figures dealing with this point (4), evidently collected with great care, call for a word of separate mention; of 39 cases, iridectomy improved sight or kept it stationary in 48 per cent., or somewhat less than one-half. In the successful cases, the observation was spread over a considerable time, as may be gathered from the statement that the mean period amounted to five years. Several of the successful cases had been followed up for ten years.

In happy cases, iridectomy acts in various ways. It is at once necessary to dismiss the idea that the incision actually opens up the blocked spaces of Fontana and the canal of Schlemm. In point of fact, the ligamentum pectinatum is seldom reached by the knife, to say nothing of the venous canal. Yet in successful cases iridectomy does act by opening up the normal channels of excretion. This is accomplished by the iris tearing away during the operation at what is normally its thinnest part, the root. Hence, the paramount necessity of performing in cases of chronic glaucoma not an ordinary iridectomy but what Mr. E. Treacher Collins (5) calls an "iridectomy-dialysis." The other way whereby iridectomy-dialysis may relieve glaucoma is by the formation of a filtering scar or cystoid cicatrix. One distinguished surgeon (6) has recently recorded his opinion, which is to the effect that "the formation of a filtering cicatrix holds out the best hope of alleviating chronic glaucoma." It is, moreover, possible, as supposed by Dr. Thomson Henderson (7), that there is a third way whereby the operation relieves chronic glaucoma, namely, by the edges of the cut iris, said never to cicatrise after iridectomy, acting as a supplementary exit for the aqueous humour into the veins of the iris. If this supposition be correct, the size and the peripheral character of the iridectomy should matter little, whereas most people hold that the exact contrary is the case.

The causes of failure, like those of success, are several in number. The most obvious (and unfortunately not the least uncommon) is inefficient performance of the operation. The surgeon either fails to make his incision in the right place, removes too small a piece of iris, or performs an iridectomy pure and simple instead of an iridectomy-dialysis. At the same time it must not be forgotten that in long-standing cases the iris and the cornea may be organically adherent at their periphery, so that even with the most correct *technique*, it becomes a physical impossibility to detach one from the other. The cause remains intact, and the consequence, in the shape of increased pressure, goes unrelieved. Herein lies the explanation of the widely recognised

---

(*a*) A lecture delivered on June 7th, 1912, to the Candidates for the Diploma in Ophthalmology of the University of Oxford (with additions).

(*b*) Col. R. H. Elliot, however, holds that trephining is preferable to iridectomy even in acute glaucoma.

fact, to wit, that iridectomy, nearly always successful in acute glaucoma, succeeds in less than one-half of the cases of chronic glaucoma. But there are other causes of failure. Owing to delayed re-formation of the anterior chamber after iridectomy, the crystalline lens may become adherent to the wound or it is possible that the sudden reduction in intra-ocular pressure brought about by operation may lead to the same result. When the wound heals in the former case the sub-luxated lens presses the ciliary processes and any iris that may be left against the ligamentum pectinatum in the region of the coloboma, and thus perpetuates the symptoms. Another cause for the persistence of symptoms after iridectomy in chronic glaucoma is to be found when part of the root of the iris is left behind, and becomes adherent to the corneal cicatrix.

The uncertainty of iridectomy to relieve cases of chronic glaucoma, known for many years, has led surgeons to devise other methods for the surgical cure of the disease. De Wecker, who believed that an iridectomy, when efficient, was so on account of the incision in the sclera, devised the operation of anterior sclerotomy. This operation, however, is nowadays usually reserved for cases which iridectomy has failed to relieve or for cases of hæmorrhagic glaucoma. Another substitute for iridectomy was introduced by de Vincentiis (8), who combined sclerotomy with scarification of the fibres of the ligamentum pectinatum in the angle of the anterior chamber left uncut by the sclerotomy. In this way the excretory channels for the intra-ocular fluid were directly freed. De Vincentiis's method is still the favourite one in certain Continental clinics. It is well spoken of by Dr. Josef Meller (9), Professor Fuchs' assistant, who describes the operation as simply consisting in the division of the tissues at the angle of the anterior chamber by means of a needle-like instrument introduced into the anterior chamber.

During recent years quite a number of operations have been introduced, the object of which is either to open up new channels for the escape of fluid from the eye or else to provide for its exit by means of a filtering scar. The underlying idea, however, is by no means new, and, for that matter, in some instances even the method itself has been forestalled by the earlier operators. The conception of a "cystoid" or "filtering" cicatrix led de Wecker, as already stated, to design the operation of sclerotomy in the year 1867, and there had been earlier attempts in the same direction by Charles Bader. The late Professor Maklakow (10) many years ago described an operation to which he gave the name of "sclerotomia obliqua," and which was clearly meant to secure a filtering cicatrix. In a communication presented to the Eighth International Ophthalmological Congress, held in Edinburgh, in 1894, the late Mr. George L. Walker (11), of Liverpool, described his experiences with various plans for the surgical treatment of chronic glaucoma, and they furnish interesting reading in the light of the procedures introduced since then (*Transactions*, p. 315). Walker had endeavoured, although without success, to produce such a fistula by passing setons into the base of the anterior chamber, but he finally managed to make a permanent fistula by inserting a conjunctival flap into an incision in the anterior chamber, and leaving it to heal *in situ*. Walker shrewdly surmised that the rude iridectomies of earlier days were more efficacious in relieving tension than the more modern ones, since in the first-named the iris often prolapsed or the wound included a tag of conjunctiva in its healing. In either case a fistula, temporary or permanent, was the result.

The reaction against simple iridectomy in chronic glaucoma has gone to such lengths in certain quarters that I have heard a good authority express his conviction that, in the present state of our knowledge, we are scarcely justified in performing the operation. This somewhat extreme statement conveys, to my mind, more than the proverbial grain of truth.

THE MODERN OPERATIONS FOR CHRONIC GLAUCOMA.

1. Lagrange's operation, or "Sclerecto-iridectomy," first described in May, 1907, is as follows (12):—Physostigmine is dropped into the eye half an hour before operation, which is undertaken under the combined anæsthetic influence of cocain and adrenalin. The sclera is punctured with a narrow blade at a distance of 1 mm. from the limbus, and the counter-puncture is made at a corresponding point on the other side, and the intervening sclera is divided well back of the irido-corneal angle. During this process the cutting edge of the blade is directed backwards, so as to bevel the sclera, like the mouth-piece of a flute, and, finally, in terminating the incision, a large conjunctival flap is fashioned with the knife. The conjunctival flap is raised by means of forceps, and thrown back over the cornea, so as to expose the wound. An adequate piece of the sclera is then removed from the lip left attached to the cornea. In the next step iridectomy is performed in the usual way. Finally, the parts are covered with the flap of conjunctiva.

The instruments include those ordinarily employed for iridectomy, with the addition of a small pair of deeply curved scissors, which should be in good cutting order, since, as every surgeon knows, the sclera is a resistent structure.

Lagrange claims that his operation results in the formation of a filtering cicatrix without any entanglement of the iris.

2. Elliot's "Kerato-sclerectomy" was first described in December, 1909, in the columns of the *Ophthalmoscope* (13). Elliot had then performed it fifty times. It essentially consists in removing a disc of sclera and cornea close to the limbus, and in covering the parts with a flap of conjunctiva. By these means, it is believed that a permanent communication is established between the anterior chamber, on the one hand, and the subconjunctival tissue, on the other, so that the aqueous humour contained in the first-named may enjoy free exit.

It is performed under the local influence of cocain and adrenalin, and, in certain cases, a hypodermic injection of morphine is given twenty minutes beforehand.

The following account of kerato-sclerectomy is taken from Elliot's latest communication (14), as well as his recently published book (15), supplemented by the account given by Mr. E. Temple Smith (16), who spent some time in Madras for the purpose of studying Elliot's methods.

After most careful irrigation of the conjunctival sac with sublimate, 1:3,000, followed by salt solution, 1.4 per cent., and the use of a 4 per cent. solution of cocaine hydrochloride, re-inforced by adrenalin, 1 : 1,000, the patient is ready for operation. A large more or less triangular flap is dissected up from above the cornea. Great attention should be paid to its position. When correctly made, it runs concentric with the cornea at its lower ends, and terminates on either side about 4 mm. below the highest point of the cornea and at the same distance from the inner and outer sides of the limbus. This flap is dissected right up to the limbus, and, indeed, a little into the cornea, a point on which Elliot lays the greatest stress. This was done until recently with the point of the closed scissors, but Elliot, following the example set by Captain Hingston, I.M.S., now uses as a routine measure an ordinary Bowman's needle for separating the conjunctival layer from the deeper parts of the cornea. The dissection is to be continued until a thin, dark-coloured crescent, about 1 mm. in breadth, surrounds the base of the flap, and affords evidence that the cornea has actually been "split." That part of the denuded area selected for the application of the trephine is cleared from loose tissue with the point of the scissors. The trephine is next applied as close as possible to the limbus, only just clearing the conjunctival flap, and in such a way that a portion of the circle to be removed, say, from $\frac{1}{4}$ to $\frac{1}{3}$ of its area, shall consist of clear corneal tissue (E. Temple Smith) (16). A few quick, light turns of the instrument cause the cutting end to "bite," after which it is lifted from time to time, so as to ascertain progress. That the trephine has penetrated the sclero-cornea is shown by three points:—(1) By the welling up of aqueous; (2) by a curious sucking sensation experienced by the surgeon; and (3) by indications of slight pain on the part of the patient. Should iris bulge through the trephine hole (which happens in about one-half of the cases), it may be snipped radially with scissors, in order to allow the aqueous to escape from the eye. Should the fluid even then not find exit, a small piece of the iris may be excised. The only reason for doing this is to prevent blocking of the wound by incarcerated iris. Iridectomy is no essential part of Elliot's original operation. At the same time, a small iridectomy is no disadvantage to the patient, and as Elliot in his book (*loco citato* (15), p. 57) points out, it adds a decided element of safety to the case. In making the iridectomy, however, it is important to put no traction on the iris, or there is a danger of the iris becoming impacted in the trephine-hole. Another point is that the scissor points should be carried right down into the aperture when excising a bit of the iris.

Some good English operators now make a point of passing a spatula into the trephine hole, so as to free any peripheral adhesions between cornea and iris, in case the trephine has been applied too far back, and for a similar reason they invariably perform a small iridectomy, since in that case an opening must perforce be made either into the anterior or the posterior chamber.

Apropos this point, Dr. A. C. Norman (17) has pointed out that, by transillumination, a good idea can be got as to the extent of the peripheral adhesions between cornea and iris, and that this may be of service in determining how far forwards the trephine should be applied. When the transilluminator is pressed against the skin of the lower eyelid in a darkened room, the so-called "anterior scleral ring"—that is, the zone of scleral tissue that lies between the periphery of the cornea and the attachment of the iris—stands out as a brightly illuminated band, relatively wide in normal eyes, but narrower and narrower in proportion to the extent of the circumferential adhesions.

Although introduced so recently, numerous minor modifications have already been made in the *technique* of kerato-sclerectomy. Elliot, as already explained, dissects a triangular flap of the ocular conjunctiva from above the cornea. He insists (*loco citato* (15), p. 50) that a large flap implies subsequent easy drainage. It has been found as a matter of experience that in a certain proportion of cases the line of incision becomes adherent to the underlying sclera. This means, of course, that the larger the flap the more extensive the area left free for absorption of the aqueous humour escaped from the anterior chamber. Besides this, the fact that the flap is so fashioned as to remain in structural continuity with the ocular conjunctiva on each side of the cornea means that even if adhesions take place the aqueous can still find a means of reaching the subconjunctival spaces external to the line of incision.

When the conjunctival flap is made in accordance with Elliot's directions it lies during the subsequent course of the operation over the cornea, and thereby conceals from view what goes on in the anterior chamber. Again, owing to the close attachment of the mucous membrane to the cornea, there is a risk of button-holing the delicate flap of tissue. Dr. L. Webster Fox (18), of Philadelphia, overcomes these drawbacks by fashioning a quadrilateral flap, which is left attached by its base to the ocular conjunctiva of the upper-inner segment of the eyeball. During application of the trephine this flap lies well out of the way, and when the operation is finished, the hole in the corneo-sclera is covered by suturing the flap to the ocular conjunctiva on the outer side of the cornea. Dr. Roman v. Mende (19), of Mitau, also covers the aperture made by the trephine by a flap of conjunctiva dissected from the upper-outer quadrant, and held in place by a couple of sutures. Elliot dissects the conjunctival flap by means of a Bowman's needle, but Mr. B. T. Lang (20) for this purpose employs a modified Desmarres' knife.

Various instruments are used for making the hole in the corneo-sclera. A Bowman's trephine, as modified by myself (21), enjoys much popularity; and the same instrument, as still further modified by Colonel Elliot (22), is rapidly coming into favour (Arnold and Sons, London, E.C.). Trephines have also been devised by Mr. E. E. Maddox (23) and Mr. B. T. Lang (20) respectively. A few surgeons employ v. Hippel's clockwork trephine, often slightly modified to suit individual tastes (A. N. Walker, L. Webster Fox). Elliot (*loco citato* (15), p. 72) sees a danger in the extremely clean hole made by the v. Hippel instrument.

At an early stage in the history of kerato-sclerectomy, Dr. F. H. Verhoeff (24) devised what he called a "sclerostome," an instrument that combines the action of a punch and a trephine. It consists of an inner rod, armed at one end with a flattened button, and an outer tube, provided with a sharp cutting edge, like a trephine. The former fits closely into the latter. The button end of the rod is passed into the anterior chamber through a slit 2.5 mm. to 3 mm. in length, made with a keratome parallel with, and at about 0.5 mm. from, the limbus. The button is carried to one angle of the incision, and then the cutting end of the tube is screwed down upon the button. In this way the disc of sclera between the two parts of the "sclerostome" is cut cleanly out.

An ingenious and beautifully made sclerectome has been advised by Mr. Percy C. Bardsley (25), of London. It consists of a keratome and a punch combined. After a conjunctival flap has been resected in the usual way, the blade of the keratome is passed through the sclera into the anterior chamber, and pushed on until a piece of the sclera in front of the incision falls under the punch. The punch is actuated by a movement of the finger, and a circular disc of sclera is cut. The exsected morsel is withdrawn with the blade of the keratome, and it is claimed to be impossible to lose the bit of sclera in the anterior chamber when using Bardsley's instrument. The sclerectome is made by Down Bros., London, S.E.

Dr. G. Young (26), of New York, advocates the making of two trephine holes instead of one, as is commonly practised. Apparently, he avoids opening the anterior chamber, inasmuch as he operates at some distance from the limbus. Elliot (*loco citato*, p. 68) condemns the modification in no uncertain words, and speaks of the operation as "a violation of the first principles on which successful trephining should be founded."

In trephining the corneo-sclera, especially with instruments of small diameter, there is always some risk that the scleral disc may fall into the anterior chamber. According to Elliot (*loco citato* (15), p. 79), this accident, which occurs in about 1.6 per cent. of the cases, results from undue force at the conclusion of the trephining. Anything like heavy pressure must be carefully avoided, then, during the final steps of the trephining. *Prima facie*, there appears to be no reason why an aseptic bit of corneo-sclera should cause inflammatory reaction. Elliot himself attaches little importance to the occurrence, even supposing it proves impossible to remove the morsel by a gentle stream of fluid from McKeown's irrigator or by means of fine forceps. He mentions four cases where the incident occurred, but was followed by no unpleasant sequel. For my own part (27), I have described a case of my own where intense irido-cyclitis and loss of the eye followed the leaving of the disc in the anterior chamber, although I am now by no means convinced in my own mind that the two things were connected as cause and result. But the danger, real or assumed, has led Dr. G. Young (28), of New York, to devise a special trephine and a particular way of dealing with the sclera. His trephine may be described as a hollow cylinder, provided with a nut near the cutting end, and at the other end with a nut, so that the instrument may be grasped securely. After resection of the conjunctival flap, a suture is passed through the episcleral tissue covering the bit of sclera to be removed. The two ends of the retaining suture are twisted together, and passed through the hollow trephine from the cutting end outwards. By the aid of the thread, the eyeball is steadied, the sclera is fixed against the cutting end of the trephine, and, last but not least, the disc of sclera is prevented from escaping into the anterior chamber.

If I have dwelt at considerable length upon Elliot's operation and its modifications it is because, in my experience, it is quite the most satisfactory of the more modern operations for chronic glaucoma. Speaking for myself, I feel convinced that it has a great future. It is tolerably simple to perform; it entails little risk; and in many cases it succeeds in putting an end to the glaucomatous process. So far as one can yet judge, its results are permanent, and I have never yet known it to fail in reducing intra-ocular tension.

3. *Heine's Cyclo-Dialysis.*—This operation was described by Heine (29), of Breslau, in the year 1905. It is performed in the following way:—A flap of conjunctiva is first raised by scissors, and then by means of a straight keratome, after any episcleral tissue has been scraped away, an equatorial incision is made in the sclera at a distance of from 5 mm. to 8 mm. from the upper edge of the cornea. The wound has a length of about 2 mm. As soon as the uvea comes into view, a narrow spatula is passed into the incision, and passed carefully between the sclera and the uveal tract through the ligamentum pectinatum until its point is recognised in the angle of the anterior chamber. The aperture in the ligamentum pectinatum is next enlarged by slight cautious side-to-side movements of the spatula. The conjunctival flap is replaced, and if thought desirable, sutured. The underlying idea of the operation, of course, is to drain the aqueous fluid away from the anterior chamber into the suprachoroidal lymph space, and in so doing, to cause detachment of the choroid. But experience has shown that detachment of the choroid does not make its appearance even when the operation has been permanently successful in lowering intra-ocular tension. It is now thought that the success attending the operation is brought about by undermining the occluded angle of the anterior chamber.

With respect to the results attained by Heine's operation, Dr. Josef Meller (9), of Vienna, states that tension is lowered permanently in about 20 per cent. of the cases, that it is lowered temporarily in about 40 per cent., and that it is not affected either permanently or temporarily, in about 40 per cent. (*loco citato*, p. 217).

4. *The Heine-Fergus operation.*—Dr. Freeland Fergus of Glasgow (29a) reflects a flap of conjunctiva, removes a disc of sclera with the trephine, and passes the point of an iris repositor from the scleral aperture through the ligamentum pectinatum into the anterior chamber (*British Medical Journal*, October 2nd, 1909) and *The Ophthalmoscope*, February, 1910) He combines, in fact, a trephining operation with a cyclo-dialysis.

As a matter of some little historical interest, it should be noted that Fergus adopted the trephining operation before Elliot, and the last-named has very handsomely disclaimed any priority in the matter (14). Indeed, in the employment of the trephine in glaucoma, both were anticipated by Dr. Argyll Robertson (30), to say nothing of Blanco (1903) and Frohlich (1904). At the same time the operations advocated by Fergus and Elliot respectively differ so much that the sole point they can be said to have in common lies in the use of the trephine. In a sense both are obviously variants of Lagrange's perforating anterior sclerectomy, as vigorously maintained by Lagrange himself (31).

5. *Bettremieux's Simple Anterior Sclerectomy, non-perforating.*—The sclera having been exposed in the neighbourhood of the limbus by the reflection of a conjunctival flap, the outer layers of the sclera are pierced tangentially to the upper edge of the cornea by a needle slightly curved at its end. The scleral layers thus transfixed are then removed with a thin and narrow Graefe knife. In this way Bettremieux shaves away a piece of sclera measuring 1½ mm. in width by 2 mm. to 3 mm. in length. It has a thickness of about ½ mm.

The good results of the operation were first explained by the inventor (32) on the theory of the production of a true filtering cicatrix, or "filtering zone," as he preferred to call it. But he now maintains (33) that they are due to an anastomosis between the deep scleral vessels and the conjunctival and subconjunctival vascular plexus.

6. *The Thread Operation.*—By a singular coincidence, Mayou (34), of London, and Zorab (35), of Southampton, published at about the same time details of an operation for chronic glaucoma, the object of which was permanently to drain the anterior chamber by means of a silk seton (*The Ophthalmoscope*, May, 1912). But in the principle involved both had been forestalled by the late Mr. George E. Walker (11), of Liverpool. The immediate incentive appears to have been furnished by Mr. W. Sampson Handley's observations upon the drainage of cases of lymphatic and venous obstruction by means of silk threads. The operation upon the eye may be described as follows:—A flap of conjunctiva is reflected from above the cornea, and dissected up to the limbus. A short incision, 3 mm. in length and situated 2 mm. from the corneal margin, is made through the denuded sclera into the anterior chamber. For this purpose Mayou employs a short Graefe knife and Zorab a keratome. A piece of sterile silk suture is tucked into the incision, and thrust by means of a spatula into the chamber. Zorab uses a loop of thread, and Mayou a piece of the same material provided with a knot at its end. Finally, the conjunctival flap is replaced, and, if necessary, one or two sutures are inserted.

7. *Herbert's Operations.*—H. Herbert has tried to realise a filtering cicatrix in many ways (36), and for a time his so-called "Wedge isolation operation" appeared to represent the apogee of his numerous experiments carried out, for the most part, upon natives of India. The method he now seems definitely to have adopted (37) is that known as the "Small Flap Operation." Details follow:—Although the operation may be done with a very narrow Graefe knife, Herbert now usually employs a keratome and a modified Taylor's cataract knife or a Lang's synechia knife for the purpose. Prior to operation, the pupil is contracted as much as possible by physostigmine. The point of the keratome is placed upon the surface of the eyeball 4 mm. or more away from the cornea, and the conjunctiva is displaced towards the cornea with the instrument. The blade is passed into the anterior chamber immediately in front of the iris. In the next step, the modified cataract or synechia knife is introduced on the flat well into the anterior chamber. Its cutting edge is turned forward at one end of the primary incision, and by slow and sawing movements a small cut is made at right angles to the primary incision. The process is then repeated at the other end of the primary incision. The effect of these three incisions is to cut, as it were, a hinged flap, a trap-door, as it were, in the sclera, which, when it heals, will entail a permanent filtering cicatrix.

Only the other day (38) (*Proceedings of the Royal Society of Medicine, Section of Ophthalmology*, December, 1912, p. 29) Herbert spoke of yet another modification in the "small flap operation." By using so-called "twin-scissors," he made, instead of a single flap, three very small flaps of sclera. The underlying idea was that the lateral flaps interposed a barrier to the penetration of new blood-vessels into the central flap, and in that way prevented the latter from healing soundly into place, and thereby interfering with the filtration which it was its object to secure. This may be spoken of as the "Triple flap operation."

8. *Holth's Operation.*—The object of this operation, called also "*Iridencleisis antiglaucomatosa*," (39) is to establish a subconjunctival cystoid cicatrix. It requires many special instruments; its *technique* is difficult to describe; and, worse than all, it aims at deliberately entangling iris in the operative wound, a thing that for my own part I cannot consider as good surgery. For these various reasons its consideration need occupy us no further in this place.

(*c*) Palliative Treatment.

In cases of chronic glaucoma some surgeons still try to keep the process in check by the long-continued employment of myotics, or agents which contract the pupil, such as physostigmine (eserine) or pilocarpine. The latter is a milder agent than the former, which in susceptible persons is liable to produce twitching of the eyelids, spasm of the ciliary muscle, headache, and even nausea and vomiting. Pilocarpine is usually prescribed as a 1 per cent. or 2 per cent. aqueous solution of the hydrochloride or nitrate salt, and one drop of the liquid is applied to the eyes two or three times a day. An oily solution may also be used with advantage. Physostigmine may be employed as the sulphate or salicylate, 0.25 per cent. to 1 per cent., being instilled into the eye night and morning. A still better plan is to use Riedel's "Physostöl"—i.e., a solution of the remedy in oil. None of the agents acts upon glaucoma unless it succeeds in contracting the pupil and in keeping it contracted. A surgeon should therefore certify himself as to this all important point.

Palliative treatment, in my opinion, should yield to surgical measures the moment it is clear that the disease is advancing, as shown by the sight and, above all, by the condition of the visual field and the readings of the tonometer. Delay is only too likely to be disastrous to everybody concerned. In our present state of knowledge, it is very questionable whether the treatment of chronic glaucoma should be persisted in to the exclusion of surgical measures. Myotics never succeed in curing the malady.

REFERENCES.

1. Fischer, Martin H. *Trans. Amer. Academy of Ophth- and Oto-Laryngology*, 1911.
2. Dor, Louis. *Ophthalmology*, January, 1913.
3. Schmidt-Rimpler. Quoted in Roemer's "Textbook of Ophthalmology," English translation, Vol. II., p. 489.
4. Laska-Fuchs. Fuchs' "Textbook of Ophthalmology," fourth English edition, p. 591.
5. Collins, E. Treacher. "The Anatomy and Pathology of the Eye," 1896.
6. Parsons. The *Lancet*, January 6th, 1912.
7. Henderson, Thomson.
8. De Vincentiis.
9. Meller, Josef. *Ophthalmic Surgery*, second edition, 1912, p. 218.
10. Maklakow. *Archives d'Ophtalmologie*, 1892, No. 5, p. 321.
11. Walker, George L. "Transactions Eighth International Ophthalmological Congress," p. 315.
12. Lagrange, F. *Annales d'Oculistique*, August, 1907.
13. Elliot, R. H. *The Ophthalmoscope*, December, 1909.
14. Elliot, R. H. *Ibidem*, August, 1911.
15. Elliot, R. H. "Sclero-Corneal Trephining in the Operative Treatment of Glaucoma," 1913, Pulman and Sons, Thayer Street, London, W.
16. Smith, E. Temple. *The Ophthalmoscope*, May, 1912.
17. Norman, A. C. *The Ophthalmoscope*, January, 1912.
18. Fox, L. Webster. *Ophthalmology*, October, 1912.
19. v. Mende, Roman. *Klin. Monatsbl. f. Augenheilkunde*, January 1913.
20. Lang, B. T. *The Lancet*, April 13th, 1912.
21. Stephenson, S. *The Ophthalmoscope*, June, 1910.
22. Elliot, R. H. *Ibidem*, January, 1912, p. 22.
23. Maddox, E. E. *Ibidem*, February, 1911.
24. Verhoeff, F. H. *Ibidem*, March, 1910.
25. Bardsley, Percy C. *Ibidem*, March, 1913.
26. Young, G. *Ibidem*, May, 1912.
27. Stephenson, S. *Trans. Ophthal. Society U.K.*, Vol. XXXI. 1911, p. 245.
28. Young, G. *Ophthalmic Record*, September, 1910.
29. Heine. *Deutsche med. Woch.*, 1905, No. 21.
29a. Fergus, Freeland. *British Medical Journal*, October 2nd, 1909, and *The Ophthalmoscope*, February, 1910.
30. Robertson, Argyll. Royal London Ophthalmic Hospital Reports, May, 1876.
31. Lagrange, F. *The Ophthalmoscope*, March, 1913, p. 191.
32. Bettremieux. *La Clinique Ophtalmologique*, August 25th, and September 10th, 1907.
33. Bettremieux. *Ibidem*, Dec. 10th, 1908.
34. Mayou, M. S. *The Ophthalmoscope*, May, 1912.
35. Zorab. *Ibidem*.
36. Herbert, H. *Trans. Ophthal. Society, U.K.*, Vol. XXIII., 1903, p. 324.
37. Herbert, H. *The Ophthalmoscope*, 1911, p. 762.
38. Herbert, H. *Proceedings of the Royal Society of Medicine, Section of Ophthalmology*, December, 1912, p. 29.
39. Holth. *Annales d Oculistique*, May, 1907.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Frederick S. Palmer, M.D., F.R.C.P.Lond., Physician to the West End Hospital for Diseases of the Nervous System, President of the West London Medico-Chirurgical Society. Subject: "Reflexes and their Significance."*

ORIGINAL PAPERS.

MY DUODENAL ULCER.

By XAVIER COMBES, M.D.,

Of the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

The history of my attack answers so exactly to the now classical description of duodenal ulcer that to relate it constitutes a complete clinical lecture on the subject.

I am æt. 43, and a medical practitioner. My father succumbed to angina pectoris at 59, and my mother to cardio-vascular troubles at 65, but she had long suffered from gastric ulcer. Personally I enjoyed good health until æt. 33 (1902) when I began to suffer from dyspepsia. Every day at about 10 a.m., I experienced acute pain in the right side of the epigastrium. The painful area could be covered by a five shilling piece. This supportable pain lasted about three-quarters of an hour, when it subsided, only, however, to recur on the morrow. This state lasted a month, and as I attributed it to hyper-acidity I discarded tobacco and irritating articles of food. In spite of this, digestion became more and more laboured for weeks and months at a time, and this went on for four or five years. Ascribing the symptoms as I did to acidity, I did not pay much attention to them.

In 1907, after a period of worry, my appetite suddenly failed and then, without any period of transition, I was seized with an overpowering sensation of hunger, associated with a distressing feeling in the stomach. The pain from which I now began to suffer came on twice a day, at 10 a.m. and at 4 p.m., and lasted until the next meal with intervals of improvement and exasperation. The pain was relieved by taking food of any kind, a tumbler of water calmed it for ten minutes, a cup of milk for half-an-hour, a piece of bread and a tablet of chocolate enabled me to await the following meal without much discomfort. Anything that distracted my attention momentarily relieved the pain. It often happened that the epigastric pain left me on entering a patient's house only to return as I went down stairs. Sometimes, however, the contrary happened, and if the consultation was prolonged the pain came back, manifesting itself by pallor of the face and drawn features, leading patients to remark, "Doctor, you seem to be in pain."

Some months later, after dining out, I had an attack of hæmatemesis. I remained in bed for twenty-four hours, and took nothing but milk for several days. I resumed my occupations on the morrow. The attacks became more frequent, and I consulted a fellow-practitioner, who diagnosed gastric ulcer. Thereupon I began to pay more attention to diet, refusing all heavy and stimulating articles of food.

It is not without interest to note that there were periods of quiescence coinciding with hot weather, but in stormy and rainy weather the pain returned worse than ever. I became very sensitive to variations of barometric pressure and also of temperature. When winter came the attacks increased in frequency and severity. At present it was not twice a day that I felt the pain, but thrice daily. The day pain was now complicated by nocturnal exacerbations. Towards midnight I used to be woke up by horribly acute pain, always on the right side and rather above the umbilicus, under the floating ribs. The pain occasionally radiated to the back. I wriggled into all sorts of positions in my endeavour to assuage the pain, but the one which afforded me most relief was flexion of the thighs on the abdomen tight enough to press on the painful area. Every night on going to bed I took care to place on my night-table a dry biscuit or a stick of chocolate, which I took as soon as the pain came on. This used to afford me temporary relief.

The attacks came on during the day at the same times. They set in with a flow of saliva into the mouth, this had a sweetish taste followed by a burning sensation and accompanied by acid regurgitations. Now and then I suffered from attacks of nausea and vomiting of food or watery fluid, and this was often followed by some relief. The teeth, especially the incisors, felt to me as if elongated, and on grinding them it felt as if I were crushing sand.

I was taking big doses of bicarbonate of soda which gave me instant relief, in fact just as soon as I had brought up a little wind. Unfortunately the relief was only ephemeral, the pain returning in about twenty minutes. When the attack came on in the street I used to run into a milk shop because a bowl of milk always put a stop to the pain.

In 1909 I tried electrotherapy. The continuous current seemed to aggravate rather than relieve, and I soon discontinued the treatment. I then placed myself on a diet composed exclusively of alimentary pastes, vegetable purées and stewed fruit. I took large quantities of bismuth, five drachms at a time, in water, of a morning. After a week of this treatment the attacks suddenly ceased. Unfortunately I was unable to keep to this diet, for several reasons. It gave rise to terrible constipation and I began to lose flesh rapidly, upwards of two pounds a week, and I felt very, very weak.

At this juncture I had melæna. Summer was coming on, and for several months the pain became less troublesome; in fact, I thought I was cured, but mere emotion, the least irregularity of diet, a fall of temperature, or a storm would precipitate a fresh attack. Then winter arrived and with it my suffering was aggravated. I managed, however, to get rid of the ten o'cock attack by substituting a bismuth paste repast for my breakfast. The same treatment, however, was not successful in relieving the afternoon pain. Thus another winter passed.

One day in May, 1910, I suddenly felt very unwell. There was a buzzing in my ears and I felt dazzled, my legs gave way under me and soon after there was copious melæna which lasted three days. I remained in bed twenty-four hours, sucked ice and then resumed my work. Solid food assuaged my pain, but I avoided eating because I noticed that the relief afforded by the ingestion of food was followed by a recrudescence of the pain soon after. Moreover, anything like a full meal gave rise to a distressing feeling of distension with oppression, yawning and belching so that the period of relief preceding the attack was the shorter the more copious the meal.

In 1911 I had occasion to pay a visit to my good friend, Dr. Larmandieu, of Rollot. I told him my tale of woe, and he at once exclaimed that it was not gastric ulcer I was suffering from but duodenal ulcer. I asked him how and on what grounds he had jumped to that conclusion, and he replied that the symptoms I had related were absolutely typical. He said, "Why you have the painful hunger and the pain coming on three or four hours after a meal, which pain is relieved by food. It is worst at the junction of the epigastrium and the right hypochondrium, you have had symptoms of hyperacidity and have had attacks of melæna. All these accidents have been presented, come on in attacks lasting several weeks or months, and are influenced by atmospheric conditions. Why, my friend, you are a splendid example of typical duodenal ulcer." "So much for the diagnosis," I said, "but what as to treatment?" "There is nothing for it but an operation," he replied, "but the statistics are reassuring: barely one death in a hundred." I left him somewhat reassured; in fact, if it had concerned a patient I feel that I should not have felt in the least anxious, but as myself was in question I had a sneaking idea that the ulcer might have degenerated into cancer. Still, I did not hesitate, and decided right away to undergo the operation as soon as the season came for a good many of my patients to go into the country.

A month after (August, 1911) came another attack of melæna, the worst I had had. I was seized in the street at 10 p.m. with stomach ache and an urgent call to go to the rear. I hastened into a café and expelled an enormous tarry mass. Thereupon I betook myself home. On my doorstep I was seized with noises in the ears and had but just time to open the door and throw myself on the sofa. This attack lasted three days, and it left me exsanguine and utterly prostrate. Nevertheless I went on working for a few months more, leading a most distressing existence, not only on account of the pain but also on account of my apprehensions of a further hæmorrhage. This occurred in April, 1912, and now I made up my mind not to wait any longer.

I called for my friend, Larmandieu, and got him to go with me to Amiens to see Dr. Panchet, who was operating at the St. Vincent-de-Paul Hospital. I lay down on a bed and he palpated the abdomen and asked a few questions before saying: "You have a duodenal ulcer; we must perform gastro-enterostomy and exclude the pylorus. The operation is not very dangerous, but I should like you to come into my home for the purpose of a radiographic examination and a test meal." I went into his home, but it was not thought necessary for me to undergo any further exploration, and it was decided that I should be operated on on the morrow after washing out of the stomach and intestine.

Of course, I can say nothing as to the operation, but I was informed afterwards that on laparotomy being performed I proved to have an absolutely typical duodenal ulcer. The vein which serves to mark the junction of the pylorus and duodenum was well marked and the ulcer was on the upper part of the first portion of the duodenum, an inch from the pylorus. It was the size of a sixpenny piece. The greater part of the upper portion of the duodenum was adherent to the gallbladder and liver. The procedure adopted was the posterior vertical operation with a short loop (vertical suspension) followed by exclusion of the pylorus.

One word about the anæsthetic. As I was suffering from a cold it was thought better to administer chloroform, but it seems I took it badly, so recourse was had to ether. But for this the sequel would have been quite uneventful. As it was I developed a sharp attack of bronchitis and the paroxysms of cough set up a good deal of pain in the suture. On the seventh day, however, things were going on so well that I got up and began to take light food and by the tenth day I began to walk about. On the twelfth day the stitches were taken out and on the fifteenth day I was able to be present at several operations. Since then my health has returned to normal.

HÆMATEMESIS AS A CAUSE OF DEATH.

By DONALD E. CORE, M.D., M.R.C.P.,

Honorary Physician to the Ancoats Hospital, Manchester.

HÆMATEMESIS is not a common cause of death, and this considering the number of diseases in which it is encountered, and the extreme prevalence of some of these diseases, is worthy of notice. Thus, for example, vomiting of blood is one of the cardinal symptoms of gastric ulcer and of cirrhosis of the liver; diseases admittedly of frequent occurrence. Yet in spite of this, it is quite uncommon for either of these diseases to terminate fatally through hæmatemesis. (*a*)

During my term of office as resident medical officer at the Manchester Royal Infirmary, a period of two years, there were but twelve fatal cases of hæmatemesis:

Gastric ulcer	6
Hepatic cirrhosis	3
Carcinoma stomach	1
Duodenal ulcer	1
Aneurysm of aorta	1

In the last case the vessel ruptured into the œsophagus, with profuse hæmatemesis.

It is, however, not so much from a statistical point of view that I wish to approach these cases, as from the standpoint of the mode of death brought about by the bleeding, and from this standpoint, hæmatemesis falls into three groups:

A. In which death is the immediate result of the bleeding;

B. In which death is due to asthenia, the result of many repeated hæmorrhages;

C. In which death is due to acute cerebral anæmia, supervening several hours after the last bleeding, and causing sudden collapse.

I propose considering these three groups in detail and in the light of illustrative cases.

GROUP A.—*Cases in which death is the immediate result of hæmatemesis.*

This comprises six out of the twelve cases. Of these six, five were males and one female. Average age, 41. The history is generally one of definite indigestion which may or may not be typical of gastric or duodenal ulceration, with or without preceding bleeding. The patients in this group, as a rule, do not die in the first bleeding, but this bleeding is followed by one or two more attacks, in which death occurs. The bleeding is, as might be expected, profuse in these attacks, and the patient is much prostrated.

A. B., female, æt. 42. Admitted into the Manchester Royal Infirmary complaining of very indefinite symptoms of indigestion; vague diffuse abdominal pain without any definite localisation, no lateral spinal pain, and general abdominal tenderness. The pain is sometimes made better and sometimes increased by food, and when it does come after food, there is no constant interval of time between ingestion and the onset of the pain. Nausea is a prominent symptom, but there has been little or no vomiting. No history of hæmatemesis. The stomach on examination is moderately dilated, and the gastric content shows the presence of free acid. The patient was considered a case of perigastric adhesions with gastric dilatation. Examination with the X-rays did not show anything suggestive of active ulceration or hour-glass contraction. The chief complaint was persistent and continuous abdominal pain, which did not improve under treatment.

After the patient had been in bed for some weeks, she quite suddenly vomited a large quantity of bright blood. Shortly afterwards she vomited a smaller quantity of rather dark blood, and became in a markedly exhausted condition.

Two or three hours later she collapsed suddenly and brought up a small quantity of bright blood. She died immediately after.

Post mortem, a large area of ulceration was found and in this area was the eroded artery that had given rise to the bleeding. The ulcer was adherent to the surrounding organs by adhesions which were recent and old. The stomach showed hour-glass contraction. The stomach and intestines contained a large quantity of effused blood.

GROUP B.—*Cases in which repeated hæmatemeses produce an asthenic condition terminating fatally.*

This accounts for five out of the twelve cases; two males and 3 females; the average age being 31 3/5 years.

The history is generally a very characteristic one of gastric ulceration, with in most cases preceding attacks of hæmatemesis. The patient, after treatment has begun, for a time does well, and then begins to complain of severe epigastric pain. Throughout the whole subsequent course of the case this is the chief complaint of the patient—severe, persistent and utterly intractable pain, and this appears to be quite independent of the food taken. The bleeding first appears shortly after the retrogression begins; the first attack is generally a severe one, and leaves the patient profoundly prostrated and blanched. It is in these cases that one sees the anæmia so characteristic of gastric hæmorrhage developed to its extreme. A second bleeding follows shortly after the first, and the course of the case is one of intense abdominal pain and a succession of hæmorrhages, varying in severity. There is generally little or no attempt at any blood regeneration. The patient becomes distended, and shows signs of local peritonitis in the epigastric region. He gradually assumes the typhoid state and dies in a state of complete asthenia. These cases are very similar to certain cases of pulmonary tuberculosis, where death is associated with repeated attacks of hæmoptysis and corresponding asthenia.

The temperature in these cases of hæmatemesis is generally raised at the onset of the epigastric pain, but subsequently becomes subnormal after the attacks of bleeding have set in. Any attempt on the part of the organism to emerge from the asthenic condition as manifested by the temperature beginning to rise, is invariably followed by hæmorrhage and subsequent relapse to the typhoid state.

Towards the end of the case the blood vomited

(*a*) *Medical Chronicle*, Manchester, March, 1913.

is black and grumous instead of being red as at the onset of the fatal symptoms With the abdominal pain is marked tympanites and intense tenderness.

This mode of death is common in the so-called return cases after a gastro-enterostomy has been performed without the relief of symptoms.

There is in addition a group of cases in which this course of events may almost be predicted; such patients are usually males, and between 30 and 40 years old. They are slightly built, and as has been said, they give a characteristic history of gastric ulceration. The most significant feature of these cases is the curious and most marked floridness of the cutaneous and mucous surfaces. The pain is so persistent and so savagely intense; the bleeding so utterly unaffected by treatment, and the final asthenia so profound, that such cases are perhaps the most pitiable that can be encountered.

Post mortem, the appearances are those of extensive ulceration of the stomach with one or several orifices of ruptured vessels visible in the midst. There is always marked and recent plastic peritonitis about the stomach in the immediate neighbourhood of the ulcerated area.

The following is an illustrative case of this group.

A. W., æt. 25, labourer. The patient gives an 18 months' history of illness, consisting of localised epigastric pain coming on almost directly after food, and passing through to the back; vomiting which eases the pain, and hæmatemesis. He has had four attacks of bleeding altogether. The symptoms tend to improve for a time and then relapse. The present attack has lasted seven weeks, and so far there has been no bleeding.

The health generally up to the onset of the present illness has been good, and there is nothing of any importance in the past history.

The patient is a small man, wasted, feeble, and with a flushed facies and bright red lips Examination revealed definite finger-tip epigastric tenderness and a dilated stomach. There was left lateral spinal tenderness. The heart was small. The lungs were normal.

The patient made good progress for the first three weeks or so of treatment, and then complained of a sensation of nausea and epigastric pain. The abdominal tenderness increased in extent, and there was a few days later a brisk hæmorrhage from the stomach, which was repeated frequently during the following week. The abdomen became distended and the tenderness and pain increased. The patient assumed the typhoid state and the blood vomited became black-brown in colour and of daily occurrence.

He died some three weeks or so after the occurrence of the first hæmorrhage.

Post mortem, a large ulcer was found in the stomach implicating several vessels. These were eroded and gaping in the thin ulcerated area. The stomach external to the area of ulceration showed marked peritonitis.

Group C.—*Cases in which death occurs a few hours after a profuse loss of blood from the stomach.*

This group most resembles Group A in that death is more directly the result of the anæmia produced by the bleeding but it differs from the cases of that group in that death does not occur immediately as a result but is delayed for a few hours and then appears to be due to sudden collapse on the part of the patient. A case which very well bears this out is one which I saw some months ago where a man æt. 29 who gave no history of previous indigestion but who had been under treatment two years before for sudden hæmatemesis vomited a large quantity of blood while at work. He was brought into the hospital vomiting blood on the way and when he was seen he was in a state of extreme anæmia and collapse with sighing breathing and an imperceptible pulse. He was transfused and rallied but shortly afterwards vomited more bright blood. Transfusion was again performed; he was given a hypodermic injection of morphia and improved greatly. Ten hours later he quite suddenly collapsed again, became restless and manifested all the signs of a severe internal hæmorrhage. There was, however, no external evidence of bleeding. He died a few minutes after the onset of these symptoms.

Post mortem, he was found to be suffering from hepatic gummata with inter-cellular cirrhosis. There was no apparent breach of the gastric mucosa and no varicosities of the lower œsophageal veins were to be seen. The stomach and upper intestine contained no blood at all but the lower part of the small intestine and the large bowel were full of black blood. In other words, there were no signs of any fresh bleeding such as had been expected from the terminal symptoms. It is probable that these terminal symptoms were due to some sudden movement on the part of the patient causing acute cerebral anæmia. This case presented many points of interest and I hope to record it fully in the near future; I quote it now from the point of view of the delay in onset of death which occurred without any further hæmorrhage.

Two out of the 12 cases fall into this group, both being males. The average age is 33.

To summarise these groups I should say that death from hæmatemesis is not common in ulcerated states of the stomach or in hepatic cirrhosis; that when it does occur it is as frequently due to profound asthenia resulting from repeated bleedings as from sudden heart failure due to one or two profuse hæmorrhages.

In a small proportion of cases of fatal hæmatemesis death is the result of acute cerebral anæmia supervening at an interval of several hours after the last bleeding.

THE
INTRAVENOUS ADMINISTRATION OF NEO-SALVARSAN IN SYPHILIS.

By J. A. NIXON, M.B.Cantab., F.R.C.P.,

Physician and Physician-in-Charge of Skin Department, Bristol Royal Infirmary.

Neo-salvarsan is a new derivative of salvarsan, obtained by Professor Ehrlich by the action of formaldehyde-sulphoxylate upon salvarsan (dioxydiamidoarsenobenzol). The resultant compound contains as its active constituent dioxydiamidoarsenobenzol - monomethane - sulphinate of sodium and bears the number "914" in Ehrlich's series. (*a*)

The first great advantage of neo-salvarsan over salvarsan is the ease with which it dissolves in water. Unfortunately, like many other organic arsenical compounds, it is unstable, and readily

---

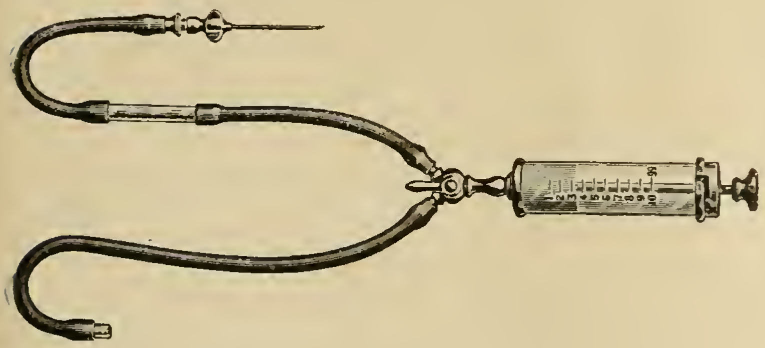
(*a*) *Bristol Medico-Chirurgical Journal*, March, 1913.

oxidises, giving rise to products which are exceedingly toxic.

My experience with this drug is short, but I am convinced that it possesses many advantages over the original salvarsan in the treatment of syphilis. The *technique* of administration is comparatively simple, but it demands close attention to detail.

Neo-salvarsan may be given intra-muscularly or intravenously; but the later is the method with which I propose to deal.

McDonagh's method of using a syringe for intravenous administration is excellent, and with slight modifications Messrs. Ferris and Co. have made for me a compact injection apparatus which fits on to an ordinary 20 c.c. Ehrlich-Hata "Record" Syringe. To the nozzle of the syringe a three-way stop-cock is screwed on, the needle of the syringe is connected with one branch of the stop-cock by a piece of rubber tubing about eight inches long, into which a "window" of glass tube is inserted two inches from the needle. To the third branch of the stop-cock a piece of rubber tubing twelve inches long is attached, through which the syringe can be filled from the solution of neo-salvarsan. A turn of the tap enables the contents of the syringe to be injected through the needle into the vein.



The preparation of the solution of neo-salvarsan is carried out as follows: Into a sterilised beaker is poured, with aseptic precautions, a sufficient quantity of the twice-distilled sterilised water to allow 25 c.c. of water for every 0.1 gramme of neo-salvarsan. The twice-distilled water is absolutely essential to avoid a febrile reaction after the injection; and it is advisable to sterilise in an autoclave the flask of water after re-distillation. The re-distillation and autoclaving should be done not longer than the day before injection. The phial of neo-salvarsan is then opened. The neck of the phial is rendered aseptic by wiping with a cotton-wool swab soaked in absolute alcohol, and filed off with a small file sterilised in the flame of a spirit lamp. Heat must not be applied to the phial itself. The contents of the phial, consisting of a finely-divided yellow powder, is shaken on to the surface of the water, and allowed to dissolve spontaneously without shaking or stirring. If the solution is not perfectly clear at the end of ten minutes, it should not be stirred or filtered; more distilled water should be added. If the water was perfectly clear of all solid particles, there will be no need of filtering: Neo-salvarsan will dissolve completely, provided sufficient water is added. A turbid solution indicates an insufficiency of water.

A second beaker should be prepared, containing sterilised normal saline solution, made from twice-distilled water. A vein at the bend of the elbow is meanwhile made to distend by placing a rubber tourniquet, secured by artery forceps, round the upper arm, taking care that the radial pulse is not obliterated.

The skin over a wide area is disinfected by swabbing once with Liquor Iodi Fortis (B.P.). The syringe and needle are completely filled with normal saline solution through the spare end of rubber-tubing, and all air bubbles carefully got rid of. The needle is introduced into a conveniently distended vein. It is better to ascertain the whereabouts of the needle's point by gently injecting a little saline solution rather than by attempting to suck up blood into the syringe. If the point is not in the vein, subcutaneous infiltration will immediately be visible as a slight swelling. Provided no such swelling appears, a few c.c. of saline solution should be injected into the vein, and the plunger withdrawn until pure blood is seen in the glass window-tube. This must be immediately re-injected, or clotting may occur in the needle.

Having made sure that the needle is properly introduced into the lumen of the vein, the needle can be kept in position by tying a piece of gauze round the tubing just above the junction with the needle (if gauze is used instead of tape or a bandage a single knot suffices, and will not slip). The tourniquet is then relaxed; a most important preliminary, and one sometimes forgotten. By a turn of the stop-cock the saline solution is emptied out of the syringe, the spare end of tubing placed in the neo-salvarsan, and the syringe filled with neo-salvarsan solution. The stop-cock is turned over to the needle, and the solution injected into the vein. This alternate filling with the neo-salvarsan and injection into the vein is continued by appropriate reversing of the stop-cock until the whole of the solution is injected. A final syringeful of saline solution should be injected to wash through the whole of the neo-salvarsan into the vein, and avoid the possibility of infiltration of the subcutaneous tissues with neo-salvarsan on withdrawing the needle.

If the subcutaneous swelling appears during injection, either the needle has become dislodged or the vein has been transfixed. A little saline solution should be injected to dilute the neo-salvarsan in the tissues, and a fresh vein must be taken for the remainder of the injection. The pain of subcutaneous injection of neo-salvarsan is intense and must be avoided.

At the end of the injection a pad of sterilised gauze is bandaged over the spot, as bleeding sometimes takes place. Carried out in this way, the operation should be followed by no reaction and no rise of temperature. Patients prefer the actual injection to be performed as quickly as possible. Using 0.9 grammes of neo-salvarsan in 250 c.c. of water, I find the injection may be made in just over five minutes. The solution is injected at room-temperature about 55°—60° F. On a very cold day the flask of water may be warmed by standing in hot water prior to making the solution; but the solution must on no account be warmed after the neo-salvarsan has been added. The solution must be freshly prepared at the time of injection, and it must not be carried about or agitated. With these precautions the danger of toxic decomposition products being formed from the neo-salvarsan is averted.

Every instrument, towel, swab, &c., to be used at the operation is sterilised by boiling or superheated steam. Sterilised towels are clipped round the patient's arm, leaving only the iodine-painted area exposed. Sterilised towels are placed under the arm and over a sufficient surface of the table or bed on which the arm rests to ensure that the syringe and its various attachments may be safely laid down if necessary upon a sterilised surface.

I find it convenient to stand the two beakers of neo-salvarsan and saline solution in a double pickle jar stand, so that both may be carried about and handed to me simultaneously. Solid particles or air-bubbles might prove fatal if injected into the vein. Should an air bubble by chance appear at the glass window tube, it must be at once drawn back again into the syringe and allowed to float up to the top. The injection may then be continued. An air bubble of considerable size in the syringe does no harm if the syringe is held perpendicularly, and the plunger is not pushed home at each thrust so as to empty the syringe. Personally, I prefer to keep a fairly large air bubble at the top of the syringe, as small bubbles if they occur in the solution can be more easily dislodged from the sides of the syringe and made to incorporate themselves in the larger bubble, which I watch constantly.

The patients do not, as a rule, experience any unpleasant effects either during or after the injection. Some complain of a slight metallic taste at the end of the injection, but it is quite transitory. Occasionally a slight headache comes on two or three hours afterwards, and I find a cup of tea is the best remedy.

It is advisable to prepare the patients as if for an anæsthetic by administering an aperient on the previous night, and giving a very light breakfast on the morning of the injection. Ordinary meals may be taken after the injection. The patients should remain at rest, preferably in bed, for two hours; if at the end of that time no unpleasant symptoms have occurred, I allow them to get up, provided they remain quiet. The first injection requires greater caution than subsequent ones, so far as after-treatment is concerned. If the patients stand the first injection well I allow them to get up and go out and about within a few hours after subsequent injections.

The dosage I employ is 0.75 gramme (No. V.) for a first injection in a healthy man, with subsequent injections of 0.9 gramme (No. VI.), at intervals of three days (in practice two injections per week), until four or five injections have been given. The Wassermann reaction in an early case of syphilis is usually positive up to four injections; if it is negative a week after the fifth injection I do not repeat the injection unless a later test shows a positive reaction again. If after the fifth injection the reaction is not negative, I give a sixth or seventh injection, with intervals of a week, taking a Wassermann test a week after each injection, and being guided as to a repetition of the dose by its results. I discontinue mercury for at least a fortnight before the first Wassermann test is made, but afterwards combine the treatments. Before finally deciding that no further neo-salvarsan is necessary, I make a final Wassermann test, preceded by a fortnight without mercury.

Neo-salvarsan is apparently contra-indicated in alcoholic debilitated subjects, or in those suffering from cirrhosis of the liver. I make it a rule to examine the urine beforehand, ascertaining with particular care that the quantity secreted is normal, that the specific gravity is within healthy limit, and, above all, that the excretion of urea is sufficient.

A trace of albumen may depend upon the syphilitic infection, but the presence of casts or sugar should in the present state of our knowledge deter us from administering any of the arsenic compounds intravenously. In cases showing signs of any syphilitic involvement of the central nervous system, especially meningitis, spinal symptoms, psychoses, or optic neuritis, great caution should be exercised, and if neo-salvarsan is administered at all, the dosage should be very small at the outset.

Observing these precautions, neo-salvarsan offers a very valuable adjunct to the mercurial treatment of syphilis. The patient's infectivity is quickly minimised if not abolished, the visible signs of syphilis are speedily dispersed, *e.g.*, the chancre, roseola and condylomata may disappear after the second injection. The symptoms are alleviated, and the Wassermann reaction changed from positive to negative, whatever this may really mean.

Time alone can demonstrate whether more solid advantages accrue, but alleviation to this extent is a gain not lightly to be disregarded. At least, neo-salvarsan offers the advantages aforesaid, as well as marked benefits in later manifestations, particularly tertiary lesions of the skin and mucous membranes. Some cases of locomotor ataxy and late nervous disorders have been improved.

In addition to these considerations it may be observed that neo-salvarsan, if cautiously prepared and administered, shows little or no toxicity, that it is easily dissolved, requires no elaborate apparatus and is injected at room-temperature. While the use of re-distilled water has proved the "reaction" after intravenous injections to depend more upon some ill-understood quality of the water than upon the drug employed.

Reference.

"Salvarsan in Syphilis and Allied Diseases." J. E. R. McDonagh. 912.

OPERATING THEATRES.

GREAT NORTHERN CENTRAL HOSPITAL.

Operation for Rhinophyma.—Mr. Arthur Edmunds operated on a man, æt. 50, who had had an enlargement of the nose for several years. For the last twelve months the disfigurement had been so pronounced that he was faced with the alternative of having something done for his condition or losing his employment. The nose was much enlarged and the tip hung down towards his mouth, forming a thick fleshy flap. Laterally there was great expansion, the sulci over the alæ nasi being quite obliterated. To those who came in contact with him in business his appearance suggested that of a heavy drinker, although, as a matter of fact, he was an extremely abstemious man. . The dilated vessels over the nose accentuated this false impression.

He was admitted to the ward for operation. This consisted merely in reshaping the organ with a sharp knife. The actual instrument employed was a skin-grafting knife provided with a fixed handle. The profile was first attended to, a thick strip of tissue being pared off, until the shape of the organ was satisfactory; care being taken to avoid going too deep and injuring the cartilages of the nose.

The sides were then pared away until the appearance from the front was approximately normal. When this had been done the nose was fairly well proportioned, but its sides were too flat and there was no sulcus over the alæ nasi. Accordingly two wedges of tissue were excised on each side so as to produce a more normal shape, and the wounds caused in this way sewn up.

There was a certain amount of bleeding during the operation, but this was never troublesome and soon stopped. The wound was then dressed with "protective," perforated with holes to allow of the escape of discharge, which was absorbed by a gauze dressing.

In these cases the hyperplasia is due to the increase in the size of the sebaceous glands; and hence, in shaving down the excrescences, the knife passes through the glands, leaving their bases in the wound. Although, therefore, the nose looks absolutely raw at the conclusion of the operation, there is no need for any skin-grafting, inasmuch as the organ is soon covered with epithelium which grows from the bases of the sebaceous glands scattered over the raw surface. In a few days the epithelial covering is completely regenerated from these numerous foci, and a thin, fairly natural skin is produced, much more resembling the normal integument than a scar. In this case the wound was completely healed in a fortnight, the incision where the wedges had been excised uniting readily, and the man's appearance was sufficiently benefited to enable him to mix with other people without exciting comment. He was allowed to resume his employment.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Meeting held Thursday, July 3rd, 1913.

The President, Dr. Amand Routh, in the Chair.

A short communication on a

calcified fibroma of the ovary obstructing labour

was read by Dr. H. S. Souttar, and the case was discussed by Dr. Herbert Spencer, Dr. Drummond Maxwell and Dr. Hubert Roberts.

Mr. Charles P. Childe (Portsmouth) read a paper on

suggestions for the technique and performance of wertheim's abdominal hysterectomy.

The author pointed out that the two conspicuous risks of the operation were shock and sepsis. Certain conditions specially favourable to the occurrence of infection should be recognised—(*a*) diminished resistance due to bad general health; (*b*) a certain amount of injury to the tissues of the abdominal wall due to retraction required during the operation; (*c*) the presence of a pelvic wound open to the external surface through the vagina; (*d*) the space of Retzius freely opened, offering favourable position for the accumulation of fluids. In some cases general infection from an ulcerating malignanat growth is present at the time of operation. Great care should be taken to avoid fouling of the wound surfaces when the vagina is divided. The author's practice was to remove all the soft parts of the growth with scissors and sharp spoon as the first stage of the operation. The raw surface was then freely cauterised, and the vagina carefully dried and painted with 2 per cent. iodine in spirit. Finally the vagina was closely packed with dry sterile gauze, the end of which was left hanging out of the vulva, to be withdrawn when the vagina was divided later on. Another important point was the manner of dealing with the pelvic wound. The author had entirely given up drainage with gauze as recommended by Wertheim, and he now never employed gauze except for hæmostasis. He laid great stress on securing complete hæmostasis, and on leaving as few ligatures as possible in the pelvic wound.

In the easiest cases the operation was severe and prolonged, and shock could best be controlled by shortening the operative procedures as much as possible. The longest part of the operation was dealing with the parametrium and the divided edges of the vagina. The author now employs only four ligatures (silk), one for each ovarian and one for each uterine artery. The round ligaments and parametria are crushed with strong forceps and the tissues divided with Paquelin's cautery. Bleeding from the vaginal walls could be avoided by applying a modified Wertheim's forceps to the part to be divided for a moment beforehand. In this way a dry pelvic wound could be secured, and the cautery would destroy cancer cells in the seared tissues. Finally, the peritoneum is sewn over without drainage, and the abdominal wound closed in layers. A ligature or two may be required when separating the bladder. A special crushing forceps designed by the author was shown.

The paper was discussed by Dr. Herbert Spencer, Mr. Douglas Drew, Dr. Russell Andrews, Mr. Vaughan Sawyer, Dr. Cuthbert Lockyer, and Dr. H. Taylor Young (Sydney, N.S.W.).

The President then delivered his valedictory address entitled "Observations on the Toxæmia of Pregnancy and on Eugenics from the Obstetrical Standpoint."

Votes of thanks were passed to the retiring President, to the retiring Vice-President, to the Chairman of the Pathology Committee, to the retiring Hon. Librarian, and the retiring Hon. Secretary, and the Section closed for the Session.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, July 12th, 1913.

At the Congress for Gynæcology, Hr. Mohr, Halle, spoke on the

Internal Secretion of the Salivary Glands and its Relation to the Genital Organs.

He said that hitherto nothing was known of any internal secretion of the salivary glands. Clinical experience, however, was distinctly in favour of such a secretion, that these glands played a part in the great system of endocrine glands, and that there was a special relation between them and the sexual organs. It was known that after ovariotomy swelling of the glands took place partly due to infection and in part to checking of secretion through insufficient nourishment. Disease of the genital organs was also known to take place in connection with mumps. The observations of the speaker were also very interesting in which he showed that in cases of syphilis simultaneous affections of the testicles and the glands in question had been noted. Observations made by him had appeared to make it more certain that such a connection existed, genital infantilism, hypofunction of the genital glands in Basedow's disease, in the status lymphaticus, in endogenous obesity of the thyreogener genital and hypophysar form. The speaker had observed a total of 17 cases of disturbance of the salivary glands in which the parotid, sublingual and other and in some instances the lachrymal took part. In some cases there was a good deal of enlargement of the glands, which led to considerable disfigurement of the face. As regarded the so-called Mikulicz disease, it was not an independent affection but one that was brought about by different pathological conditions. The condition was one either of primary anomaly or an acquired one, and in the latter case it was, perhaps, compensatory—a hyperplasia like that of swelling of the thyroid after removal of the ovaries or after the climacteric.

Hr. Albrecht, Munich, discussed the

Internal Secretion of the Mammary Gland.

On the basis of experiments performed by himself, the speaker came to the conclusion that extirpation of the mammæ in a young lamb had no appreciable influence on the development of the animal, the individual systems of glands, rut, gravidity, or labour. Strictly, the mammæ should not be considered as glands with internal secretion. After extended experience in the injection of mammary extract he found some inhibition of the ovarian function, and in the human subject suppression of the menses. It was questionable whether this was due to any specific action of the mammary extract. Various observations led to the assumption that it was possibly due to a toxic effect produced by other organs. These substances that did not come into the circulation physiologically were reabsorbed after free accumulation during lactation, and it was then that they exerted their inhibiting influence on the ovarian fuction.

Hr. Mosbacher, Frankfort a/M., read a paper on the subject of

THE THYROID AND PREGNANCY.

All the pregnant animals treated (thirty guinea-pigs and three cats) with only two exceptions aborted when fed with thyroid gland material. All the control animals fed with mutton suffered no interruption of their pregnancies. Thyreoglandol (Hoffman, La Roche and Co.) often acted as an excitor of uterine contractions. Of forty women to whom it was given by injection in different quantities, twelve of them had their labour pains increased and strengthened. In twelve cases in which the injections had no effect a combination of thyreoglandin and adrenaline was given, but in all without any effect. Seven of the cases showed brilliant results from the use of pituitrin.

Hrn. Lichtenstein, Leipsic, and R. Freund, Berlin, discussed the

TREATMENT OF ECLAMPSIA.

The former was an advocate for the "waiting or expectant" form of treatment. Of 94 cases treated by venesection and delivery the mortality was 5.3 per cent. The infant mortality was 37.3 per cent., for the viable infants 21.6 per cent. Seventy-four cases in uninterrupted series recovered. For sixteen months there was no death from puerperal convulsions. The necessity for active treatment was, therefore, not proven, but must be looked on as positively harmful, and should give place to the expectant form.

Hr. Freund, who took an opposite view, said that in the Leipsic Hospital between October, 1912, and April, 1913, 46 cases of eclampsia had been submitted to the expectant method of treatment (venesection and narcotics); four mothers died of convulsions, two recovered during gravidity. One bad case of eclampsia during pregnancy got very much worse at the sixth month, and anterior hysterotomy had to be performed to save her life, which it did. The infantile mortality had much increased under this treatment. It was 41.9 per cent., against 17 with early delivery. He also reported as regarded some other toxines (one toxicoderms, and two cases of hyperemesis). The first three skin cases recovered after injections of gravid serum, the following four after horse serum. For the last nine skin cases and those of hyperemesis, 200ccm. of Ringer's Solution were injected. All recovered except the last five skin cases, one of which proved quite refractory, the rest suffered four relapses, and three of them recovered spontaneously later on.

AUSTRIA.

Vienna, July 12th, 1913.

PATHOLOGY OF THE SPLEEN.—SPLENECTOMY: ITS INDICATIONS AND RESULTS.

AT the late meeting of the Gesellschaft für Innere Medizin und Kinderheilkund in Vienna, Dr. H. Eppinger made a communication on the pathology of the spleen. It was first pointed out that oscillations of the iodine standard of the blood fat, which had been freed from cholesterin and cholesterin-esters, had appeared both before and after splenectomy. The iodine standard reached the minimum after extirpation of the spleen, while it was at highest after toluylendiamin poisoning. Analogous researches had been made on human blood in the most varied conditions of disease. Here the iodine standard was very high in the hæmolytic processes—*e.g.*, in pernicious anæmia, hæmolytic icterus, hypertrophic liver cirrhosis, and in catarrhal jaundice. The determination of the quantity of urobilin in the alvine evacuations was also discussed. The normal amount *pro die* is 0.15 gr. Great variation is observable in pathological conditions; the largest amount met with was in hæmolytic jaundice, in which it amounted to 3.4 gr. Large quantities were also met with in pernicious anæmia, in some forms of icterus catarrhalis; also in many of those cases of cirrhosis which are accompanied by icterus. When the fact is recognised that urobilin is derived from the broken-up hæmatin, it can be utilised as a measure of the hæmolysis proceeding at the time.

Further indications may be derived from the parallel coures of the high iodine standard and the high urobilin values. Splenectomy is indicated in cases of hæmolytic icterus; thereupon the quantity of urobilin found in the fæces sinks to the normal quantity. As this fact proves the enormous influence which splenectomy has on the hæmolysis—the data being estimated by the urobilin values—so does the same operation appear to be indicated on therapeutic grounds, in other cases of increased hæmolysis. In accordance with this view, the spleen—although apparently not enlarged—was removed in two cases of uncomplicated pernicious anæmia. The result was actually brilliant: the number of erythrocytes rapidly increased till it reached the normal. The body-weight increased—up to 10 kg. The urobilin values sank to a subnormal level. The patients felt themslves perfectly well. Now two months have elapsed since the operations, so that there can be no doubt of the establishment of the cure, and the results are extremely encouraging. Mention was also made of the operative procedure in two cases of hypertrophic cirrhosis of the liver. The icterus rapidly disappeared, and improvement of the general condition set in. Within a comparatively short time ten patients, who showed indications of increased hæmolysis, had been subjected to the operation of splenectomy. Some of them had displayed the so-called Banti's symptom—complex. The result was always a conspicuous one. Histological examination of the spleen showed, in some of the cases (pernicious anæmia, hæmolytic icterus), intense hyperæmia in the neighbourhood of the sinus; in others, fibro-adenic (Banti's disease, hypertrophic cirrhosis of the liver). Possibly the fibro-adenic should be regarded as a natural healing process instituted by Nature to counteract the increased hæmolytic powers of the spleen. In some of the cases of hypertrophic cirrhosis of the liver the changes of structure appeared to be very slight; in those previously described they recalled the alterations found in cases of toluylendiamin poisoning. Apparently, all three diseases—pernicious anæmia, hæmolytic icterus, and hypertrophic cirrhosis of the liver—may be traceable to a common genetic origin—an increased splenogenic hæmolysis, perhaps. Nevertheless, the symptoms are found to vary, whether the bone-marrow remains or not; so also may the functional activity of the liver in presence of the mischievous effects of an increased formation of bile pigments. Simultaneously with the reactionary changes (fibro-adenic) in the structure of the spleen the symptoms may also vary.

Dr. E. Ranzi exhibited some patients from whom he had removed the affected organ on account of splenomegaly. A patient of Dr. Eppinger had had a spleen of 1.300 grams removed, and the defects of growth rendered the procedure difficult. A woman, æt. 54, was also shown from whom the spleen had been removed. She had suffered for about a year from acute pains in the upper part of the abdomen, at first on the right side, afterwards on the left also. Pronounced jaundice developed in time, with itching of the integument. The splenic margin reached two fingers' breadth beyond the middle line, and the liver was also enlarged. The spleen was removed on April 15th, and weighed 1.400 gr. The upper pole had been adherent. The patient now felt quite well, and the jaundice had completely disappeared.

With regard to the dangers of extirpation of the spleen, Ranzi noted the results of ten cases of splenectomy, all of which had been performed on account of the development of splenomegaly. Of these eight were cured by the operation, the recovery being complete. Of the other two cases, one succumbed from shock four hours after the operation, and the second died of peritonitis which resulted from the perforation of a duodenal ulcer. The technical difficulties of the operation are chiefly due to circumstances, the usually important condition being the extent of adhesions. When these are absent splenectomy is quite a simple operation.

HUNGARY.

Budapest, July 12th, 1913.

On Acute Dilatation of the Heart.

A most interesting and exhaustive article by Dr. Bálint Rezsoe is contained in the "Drvosi Havi Ertesito," No. 5, Vol VII., and materially increases one's knowledge of the ætiology of acute dilatation of the heart. In all the experiments the size of the heart was measured by X-rays, so that the results must be looked upon as absolutely accurate. In the first series, a large number of patients were requested to work a specially constructed apparatus to the limits of endurance, and the skiagraph was then compared with the one taken several hours before. The endurance was greatest in convalescents from mild diseases, least in those afflicted with neurasthenia and hysteria, but an increase in cardiac volume, sufficient to warrant a diagnosis of acute dilatation, was absent, even in myocarditis and endocarditis. Only one girl, suffering from severe loss of compensation, secondary to mitral lesion, presented a marked increase in size after a walk of one hour, which considerably taxed her strength. Healthy porters were then intructed to wrestle up to exhaustion, with absolutely negative results even when circulation was embarrassed by a tight band around the abdomen and dyspnœa and cyanosis were marked. Large doses of alcohol and forced respiratory movements were also without result. The following experiments were then made with animals:—(1) A dog is forced to rotate a wheel until exhausted for several days in succession, so that the animal finally dropped as if dead. No increase in volume could be detected. (2) The vagus was irritated with the faradic current till the heart's action ceased. An acute dilatation of the ventricles set in. (3) Traumatic aortic insufficiency had no effect. (4) The introduction of air into the veins caused death by acute dilatation. (5) Saline infusion till the heart stopped beating was without influence. (6) A fatal dose of digitalin caused contraction of the ventricles and dilatation of the right auricle, with general change in shape. (7) Muscular exertion after daily venesections and starvation had no effect, but acute dilatation was very marked if the animal was fatigued after the contents of a tuberculous cavity or some other toxic material was injected. (8) Phosphorus and oil of pennyroyal caused a fatty degeneration of the heart and some relaxation, not amounting, however, to dilatation. (The same were the results in the experiments of D. de la Camp, too). (9) A strange behaviour was noticed when all extra-cardial nerves were severed, the animals became fatigued after the slightest exertion, yet the heart-shadow remained nearly normal. All the experiments proved that a normal heart, or one the seat of only slight lesions, is incapable of over-distension, no matter how its working capacity is taxed. The records of a number of cases of dilatation observed by the author are in accord with this, for in all three was some serious lesion. In the non-fatal cases this may not be evident; the heart may possess its normal size and beat normally after the attack is over; but a careful history and examination will always disclose some previous—not necessarily severe—infection or some chronic systemic derangement which is sure to alter the heart-muscle. It cannot, however, be denied that the healthy heart may occasionally dilate when several injurious factors act upon it at the same time. Thus, besides over-exertion, there may also be the coincident ingestion of too much fluid. Soldiers marching long distances, when heavily laden, sometimes suffer from attacks, and the effects of rarefied air in mountains are undeniable, though not readily explained.

Cardiac Disturbances and Diseases of the Biliary Passages.

There have been observed many cases of biliary colic in which the cardinal symptoms of the affection, such as pain on the right side and the like, have been absent, the attacks being accompanied by cardiac or pulmonary phenomena, such as asthma, disturbance of the pulse rate, and others. In some cases there even appeared an insufficiency of one of the cardiac valves, which, however, disappeared with the cessation of the attack. Dr. Berkovits reports three cases of biliary calculi in which these reflex cardio-pulmonary disturbances were quite marked during the attacks of colic. Thus, one of them suffered from very severe dyspnœa, during which there was a high degree of oxygen hunger. It is of interest to note that physical examination during one of these attacks of dyspnœa failed to detect any difficulty in the ingress of air to the lungs. The heart showed an elargement, principally of the right ventricle, accentuation of the second pulmonary sound, and insufficiency of the mitral valve. As regards the pathogenesis of these disturbances, Dr. Berkovits considers them under three heads: Mechanical, poisonous (intoxication), and reflex. Of these he regards the last of the greatest importance. It is considered that the mucous membrane of the biliary ducts serves as the starting point of the reflex act. The muscles of the biliary ducts and sphincter at the junction of the ductus choledochus and the duodenum are innervated by the vagus and sympathicus. This was proven experimentally, as well as during a laparotomy, when the operator, by manipulating the region about the ductus choledochus caused repeatedly cessation of the right pulse, which reappeared as soon as the manipulations were stopped. The sympathetic is thought to be the path through which the reflex travels. In the absence of any causative agencies in the lungs and heart in certain cases of dyspnœa, Berkovits advises to remember the possibility of cholelithiasis as the underlying cause of the condition.

CANADA.

Toronto, June 24th, 1913.

Opening of Toronto General Hospital.

It was but a few years ago that Toronto was more inadequately supplied with hospitals than any city of a like size in the civilised world. Now she is as well supplied as any city, and better than most cities. This remarkable change has been brought about within the past five years. However, before describing the magnificent hospital buildings which were opened on June 20th, it will be fitting to say a few words concerning the opening ceremony. This was performed by the Lieutenant-Governor of Ontario, Sir John Gibson, who, escorted by a company of medical men and trustees, unlocked with a golden key the front doors of the main building. In the address of Sir John Gibson, a note of regret was sounded that the Duke of Connaught had not been able to open the hospital, as he had fully intended. The Lieutenant-Governor paid a high compliment to Mr. Flavelle, to whom was chiefly due the credit for the erection of the new buildings, and it was gratifying to think, said Sir John, that there were men in Toronto like J. Ross Robertson, of everlasting fame and reputation; Mr. W. J. Gage, and the donors to the General and other hospitals who have demonstrated that the acquisition of wealth means that the people as a whole may acquire benefits which they would not otherwise receive.

Your correspondent, on Saturday, June 21st, went through the new buildings, and was greatly impressed by all he saw, and will endeavour to explain the general plan and scope of this, one of the largest and perhaps the most fully-equipped and most complete general hospital in the world. The main buildings face College Street, and as the hospital is intended to serve as the medical school of Toronto University, the buildings of which are also on or near College Street, the situation from the students' point of view is all that can be desired. From the patients' point of view it is conveniently situated, College Street at the present time being almost in the centre of Toronto. The buildings are placed on a piece of land nine acres in extent, the cost of which was $610,000 (£102,000). The buildings provide for the accommodation of 670 in-patients. Of the 670 beds in the hospital, 150 are for private and semi-private patients, while 520 are for public ward patients. The private patients' building is a self-contained unit. and thus the remaining buildings, with grounds and gardens, are for the use of the sick poor. It is expected that the private patients' department will not only be self-supporting, but will provide a surplus revenue which will go towards the maintenance of poor patients.

The buildings comprise administration building, medical and surgical buildings, out-patients' department, pathological building, emergency building, nurses' home, and the various buildings which are necessary to the carrying on of the work of a modern hospital complete in itself. The out-patients' department, the cost of which has been borne by Mr. Cawthra Mulock, is especially worthy of notice. The surgical wards were erected at the expense of Mr. J. C. Eaton, who also provided the equipment for the surgical theatres. The emergency building, with all its equipment, was the gift of two ladies now deceased, the Misses Shields.

The necessity to provide steam and hot water for the ventilation system, the laundry, the refrigerating plant, the operating-rooms, the kitchens and the pantries, required the installation of a central steam, power and heating plant, with the hydro-electric system available as an auxiliary, using the exhaust steam for the heating system, which circulates hot water by pumps through the radiators in all the buildings.

The total cost of the buildings has been $3,450,000 (£690,000); towards this sum the Government of Ontario, on behalf of the University of Toronto, contributed $600,000 (£120,000), the City of Toronto gave $400,000 (£80,000), private citizens contributed $1,400,000 (£280,000). The proceeds of the sale of the property on which the old hospital stands will be applied to liquidate the debt of $1,050,000 (£210,000), leaving a sum to be raised of about $800,000 (£160,000). However, it as announced at the opening ceremony that the City Council had recommended that a further grant of $210,000 (£42,000), be made, and that subscriptions of $50,000 (£10,000) had been promised. Thus it seems likely that in a short time the hospital will be free from debt.

From a necessarily somewhat cursory inspection, the impression was conveyed that nothing has been left undone to build and equip a thoroughly efficient hospital and medical school. The wards and corridors are roomy, airy, and well ventilated. Perhaps the out-patients' department is that which most strikes the skilled observer. It may be stated with little fear of contradiction that it is the most nearly perfect example of such a department as yet built. In the space at the disposal of a correspondent, it would be impossible to enter into details relating to the construction, arrangement, equipment and furnishing of this great institution. Suffice it to say that it is one of which the originators and citizens of Toronto may well be proud and is a striking object lesson on the intelligent co-operation of state, city and private zeal and munificence.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH UNIVERSITY GRADUATION CEREMONIAL.

THE degrees in medicine and science were conferred on Friday last, July 11th, in the McEwan Hall, by Principal Sir William Turner, Vice-Chancellor of the University. There were 68 degrees of M.D., 3 of M.S., 98 of M.B., Ch.B., 25 of B.Sc., and a few arts and philosophy degrees. After the graduates had been duly capped and a number of scholarships and prizes awarded, Professor Robinson, the promoter, delivered the customary address, in the course of which he said that while for many years the conditions under which new graduates faced their work had remained practically unchanged, those who took their medical degrees that day joined a profession which had been made a pawn in the game of party politics—a business which appeared to have no regard for truth or justice unless these happened to be associated with party advantage. It was necessary for the medical profession to combine in the interests of public health, otherwise the interests of the profession would be bartered for political advantage. It seemed not improbable that the time would come when medical men would have to fight for proper hours of labour and relief from clerical work to get time to attend to the advancing knowledge of their profession.

THE INSURANCE ACT.

The Royal Faculty of Physicians and Surgeons of Glasgow have intimated to the Prime Minister and to all members of Parliament a resolution passed at the last meeting of the Faculty, with an expression of their hope that it will be favourably considered. The resolution reads: "That the Royal Faculty of Physicians and Surgeons is of opinion that in connection with the forthcoming Bill to amend the National Health Insurance Act the Government should invite the opinion of the Royal Medical and Surgical Corporations as to the amendments, if any, relating to the medical sections of the Act, which would ensure efficient medical and surgical work among insured persons."

From a review of the first year's work of the Act in Leith by the Chairman of the Burgh Insurance Committee, it seems that during January, February, and March the average numbers of visits and attendance at the surgery per doctor per day were between 3 and 4, 6 and 7 respectively. The number of insured persons was 26,427, of whom 6,065 received treatment in the shape of nearly 17,000 visits. For this the sum of £2,030 was due to the doctors. The average number of patients per doctor on the Leith panel was about 1,000; the figure 539 given by the Commissioners being due, as was suggested in this column a week or two ago, to the presence of a number of Edinburgh doctors with very few Leith patients on the Leith panel.

NEW PROFESSOR OF PHYSICS IN EDINBURGH.

Prof. C. G. Barda, F.R.S., King's College, London, has been elected to the vacant chair of Natural Philosophy in Edinburgh. Prof. Barda is a distinguished physicist, having held the Bibby Scholarship, the Oliver Lodge Fellowship, and an 1851 Exhibition Fellowship. He is a Fellow of the Royal Society, and his work on radio-activity has been recognised widely here, in France, and in Germany.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE HONORARY STAFF OF THE MOUNT VERNON HOSPITAL AND THE COMMITTEE OF MANAGEMENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—As Chairman of the Medical Board of the Mount Vernon Hospital for Consumption and Diseases of the Chest, I am desired by the Board to forward to you the enclosed letter with the view to publication in the columns of your journal.

I am, Sir, yours truly,
F. W. TUNNICLIFFE.

Harley Street, W.
July 9th, 1913.

[ENCLOSURE.]

To the Committee of Management of the Mount Vernon Hospital.

Gentlemen,—We, the undersigned, members of the honorary medical staff of the Mount Vernon Hospital, greatly regret that we feel it our duty to protest strongly against the attitude which for the past few months the Committee of Management has adopted in reference to the Medical Board and its recommendations.

The recent summary dismissal of two physicians from their appointments at Northwood is not only in direct opposition to the recommendation of the Medical Board, but, as we are advised, is illegal and *ultra vires.*

Another objectionable feature of the conduct of the Committee of Management towards the Medical Board was the refusal of the former to accede to the request of the Medical Board of May 6th, 1913, to hold a joint conference, at which it was the intention of the Board to put the above and other questions before the Committee of Management in an amicable and in no sense contentious spirit, feeling, as they did, that their correct solution was vital to the interests of the hospital.

In conclusion, we, the undersigned, as a protest against the illegality and injustice of the recent actions of the Committee of Management, beg to give notice of our intentions to resign our position as honorary medical officers to the hospital on July 20th next, but without prejudice to any steps we may subsequently legally be advised to take, especially with regard to the institution of an inquiry into the manage- of the hospital. We take this course with the profoundest regret, inasmuch as it involves the severance of our connection with an institution the interests of which we have had deeply at heart and to which some, inded many, of us have given a no inconsiderable portion of the best part of our professional lives.

(Signed)

Hermann Weber.
Clifford Allbutt.
Watson Cheyne.
F. W. Tunnicliffe.
Arthur Latham.
F. W. Price.

A. J. Whiting.
James Berry.
H. J. Scharlieb.
C. Harrison Orton.
Arnold Gabriel.
E. D. D. Davis.

June 20th, 1913.

MEMORIAL TO THE LATE DR. GEORGE ALEXANDER GIBSON.

To the Editor of The Medical Press and Circular

Sir,—Friends of the late Dr. George Alexander Gibson will be pleased to learn that the recent appeal for a fund to establish a "Gibson Memorial Lectureship" has already met with a most gratifying response.

A meeting of those subscribers who have intimated that they wish to join the General Committee of the Memorial Fund will be convened some time in October. After this the subscription list will be closed, and a copy, together with the resolutions of the General Committee, will be sent to each subscriber.

In case there may be any of the late Dr. Gibson's friends who did not receive an intimation and who might desire to subscribe, I may add that the Honorary Treasurer of the Memorial Fund is Mr. A. Gray Muir, W.S., 19, York Place, Edinburgh.

I am, etc.,
George A. Berry,
Convenor of the Executive Committee.
31 Drumsheugh Gardens, Edinburgh.
July 9th, 1913.

ALCOHOLIC QUACK MEDICINES.

To the Editor of The Medical Press and Circular.

Sir,—Medical temperance reformers are under an old and growing obligation to your paper for the consistent and persistent fashion in which you have always exposed the evils of alcoholic intemperance. Your forcible, albeit brief and pithy editorial of June 18th, headed "In Vino ?" deserves, like many of your recent utterances, to be brought before the notice of the various temperance societies, and the organs that represent them. There can be no doubt about the mischief that is being wrought by the traffic in quack cures the sole potent ingredient of which is alcohol. In a law case a short time ago it was stated in evidence that between £50,000 and £100,000 a year was being spent in the advertising of a single one of these compounds. There are scores on the market. There are, of course, legitimate pharmaceutical proprietary articles in which alcohol forms a chief ingredient, but these are intended for use by medical men alone who employ them after diagnosis as therapeutical agents in the few forms of disease in which a stimulant of the kind is needed. If there is any one fact in medicine that is demonstrated beyond controversy it is the fact that alcohol cannot be a cure for any disease, and that in every case of disease of whatever origin where the chief subjective symptom is depression, alcohol acts as a poison of the most pernicious character. It is as positive cures for diseases of this kind that many alcoholic nostrums are mostly advertised. They must be inflicting injury, and deadly injury, upon thousands of wretched sufferers whose maladies might be relieved by medical science. They must be acting as the cause of a vast amount of chronic inebriety, and leading great numbers of innocent people to acquire a vice to which they may become enslaved. Convincing evidence to this effect was given before the Select Committee by Dr. Mary Sturge. Why do not the temperance societies take up this question? Why do not their journalistic representatives strive to force it upon the attention of the legislature? It seems probable that in such a crusade they would have the leading journal on their side. In a leading article a year or two ago "On the Care of the Inebriate," the *Times* discussed this question. It pointed out that :—" Every inebriate passes through an early or preliminary stage; and the time-honoured principle, to oppose beginnings, might in very many cases be applied to him successfully. In the case of drugs much might be done by a strict interpretation and enforcement of the laws against the sale of poisons, and by the absolute prohibition of the many quack medicines, advertised as remedies for various complaints, which owe their popularity to the cocaine, the morphia, or the alcohol which they contain, and to the temporary and delusive sense of comfort which they afford. Preparations of this class are the frequent causes of an ultimate resort to the same agents in stronger forms; just as the practice of taking irregular drinks at all periods for so-called good-fellowship, or for 'any other reason why,' is a common precursor of habitual intoxication."

I am, Sir,
Yours truly,
Temperance Reformer.

June 20th.

MARRIAGE, BIRTH AND DEATH RATES IN 1912.

To the Editor of The Medical Press and Circular

Sir,—In the letters on this subject which you have so frequently in late years favoured me by publishing I have invariably insisted upon the fact which forms the opening statement in your excellent leader of to-day—namely, that the steady decrease in the birthrate forms "a problem that strikes deep into the roots of our national prosperity—nay, of our very existence." For more years than I care to count—but it is at least a quarter of a century since my first letter on the subject appeared in your pages—I have been a student of the question, keeping my attention mainly fixed on the phenomena being displayed in France. The French have carried the idea of restriction of births to its logical conclusion, or even beyond that point. If it were not for the presence on the French soil of 1,500,000 foreigners constantly being naturalised and assimilated, the population would now show an annual decrease. The average number of children per family does not exceed two. With regard to the effects upon the quality of the race, I believe that any system of artificial selection not based upon and controlled by science must lead to deterioration; and I believe that deterioration is progressing among the French. With regard to the effects upon national stability, the lack of an exuberant population has rendered France, without the help of allies, unable to defend herself in a fight to a finish against Germany, and has rendered her incapable of holding for long the vast overseas dominions which she now possesses, and to which she is unable to supply any emigrants. We are following the example of France. We are guarding, keeping alive, and helping towards marriage the early born of the possible broods, and as these are not as a rule the best bred physiologically, we are carrying on a system of artificial selection of the wrong sort—a system which can have only one result. Our Colonies and dominions contain millions of unpopulated fertile square miles of land under magnificent climates. Possibly Canada may remain British, but unless we people Australasia and Africa we cannot hope to hold them for long. They could take all our normal surplus for hundreds of years. If in the course of the centuries the population question should become acute science will have put into the hands of posterity the means to deal with it. But what has posterity done for us that we should sacrifice for posterity? Let us eat, drink, and be merry, for to-morrow we die.

I am, Sir, yours truly,
A Student of Sociology.

July 2nd, 1913.

SPECIAL REPORTS.

REPORT OF THE REGISTRAR-GENERAL FOR IRELAND.

The annual report of the Registrar-General for Ireland, which contains a general abstract of the numbers of marriages, births, and deaths registered in Ireland during the year 1912, has been laid on the Table of the House of Commons. The report shows:—

(*a*) An increase of 1,102 in the population of Ireland in the middle of 1912, as compared with that in the middle of the preceding year.

(*b*) The lowest annual death-rate from all causes recorded for Ireland since 1871, viz., 16.46 per 1,000 of the population.

(*c*) The lowest annual death-rate from tuberculous disease on record, viz., 2.15 per 1,000, the next lowest rate from this disease being 2.20 per 1,000 in the previous year (1911). The number of deaths caused by tuberculous disease in 1912 is 186 less than 1911, and 3,257 less than the number recorded in 1904, and

(*d*) A decrease in infant mortality from 94 per 1,000 births registered in 1911 to 86 per 1,000 births registered in 1912. This is the lowest infant mortality rate recorded for Ireland. The highest infant mortality rate was in the year 1880—namely, 112.

The marriages registered in Ireland during the year 1912 numbered 23,283; the births, 101,035; and the deaths, 72,187. The marriage-rate was 5.31 per 1,000 of the estimated population, showing a decrease of 0.04, as compared with that for the year 1911, but an increase of 0.12 as compared with the average rate for the ten years, 1902-1911; the birth-rate was 23.0 per 1,000 of the estimated population, being 0.2 under that for the preceding year, and 0.3 under the average rates for the ten years 1902-1911; and the death-rate (16.46 per 1,000) was 0.07 below the rate for the preceding year, and 0.83 below the average rate for the ten years 1902-1911.

The report informs us that in the aggregate the deaths from tuberculosis numbered 9,437, or less by 186 than the number registered in the year 1911. The total is equivalent to 2.15 per 1,000 of the population of Ireland estimated to the middle of the year 1912, as against 2.20 per 1,000 in 1911. From the year 1904, when the death-rate from tuberculosis was 2.9 per 1,000 the rate has fallen steadily. It declined to 2.7 in each of the years 1905, 1906, and 1907; to 2.6 in 1908, to 2.4 in 1909, to 2.3 in 1910, and, as already mentioned, from 2.20 in 1911 to 2.15 per 1,000 in 1912, the period now under notice. A subsequent table shows us that of the 9,437 deaths from tuberculosis, 4,682 were of males, and 4,755 were of females; that there was a decrease of 66 deaths in the Province of Leinster, an increase of 10 deaths in Munster, a decrease of 93 in Ulster, and a decrease of 37 in Connaught. It may also be seen amongst the principal causes of death, that tuberculosis is the second highest, standing in between old age, the highest, and heart disease, the third highest cause of death. The death-rate from tuberculosis in England and Wales, in Scotland and in Ireland, are compared since the year 1864. In the year 1911 the rate in Ireland was 2.2, in Scotland 1.7, and in England 1.5 per 1,000 of the respective estimated populations of the three countries.

Dealing with pulmonary tuberculosis, the report informs us that altogether the deaths included under this heading amounted to 7,452—of males, 3,671, and of females, 3,781, corresponding to the following rates:—1.70, 1.68, and 1.72 per 1,000 of the respective populations. In the year 1911 the total number of deaths from pulmonary tuberculosis was 7,584—of males, 3,702, and of females, 3,882. These figures correspond to the following rates:—1.73, 1.70, and 1.77 respectively. The highest death-rate from pulmonary tuberculosis, we are informed, for both males and females, was between the ages of 25 and 35 years. For both sexes it was 3.13 per 1,000—for males, 3.09 per 1,000, and for females, 3.17 per 1,000.

There were 8,727 deaths of infants under one year of age registered for the whole of Ireland. Of this number, 4,991 were deaths of male infants, and 3,736 were deaths of female infants. The total is equivalent to a rate of 86 per 1,000 of all births registered in the year, and is 8 per cent. under the rate for 1911. In the year 1911 the infant mortality rate was 94 per 1,000 births, and the average infant mortality rate for the ten years, 1902-11, was 0.5 per 1,000 births. It appears that for Ireland the infant mortality rate was 86.4 per 1,000, that in the "civic" unions it was 115.2 per 1,000, and that in the remaining unions of Ireland it was 66.5 per 1,000. In the year 1911 the figures for the "civic" and remaining unions were 128.4 per 1,000, and 70.9 per 1,000 respectively.

It would appear from the returns collected and forwarded to this Department by the Royal Irish Constabulary and the Metropolitan Police, who acted as enumerators at the several Irish seaports, that the number of emigrants (natives of Ireland) who left the ports of Ireland during the year 1912 was 29,344, of whom 15,325 were males and 14,019 females. Of the total emigrants, 3,855 were natives of the provinces of Leinster, 7,167 of Munster, 11,852 of Ulster, and 6,470 of Connaught. In 1912, of the 29,344 emigrants, 7.6 per cent. were under 15 years of age, 85.9 per cent. were between 15 and 35 years old, and 6.5 per cent. were 35 years or upwards.

REVIEWS OF BOOKS.

CABOT'S PHYSICAL DIAGNOSIS. (*a*)

We welcome the publication of the fifth edition of this well-known standard work, which has been revised and reset throughout, with the addition of twenty-three new illustrations. Little can be added to the tokens of approbation with which preceding editions of Dr. Cabot's book have been greeted, for all of the editions carry the impress of a master-mind, and the individuality of the author finds expression in every line of the text. The continued success of this book amidst considerable competition rests upon its practical utility. No space has been given to the description of tests which the author has discarded as valueless, and no *technique* has been described with which he is not thoroughly acquainted. "All that I have described," says Dr. Cabot in his preface, "I know by prolonged use." The most important additions are those which deal with the circulatory system and the methods of recording the variations which occur therein in the form of arteriograms, phlebograms and electrocardiograms. Here, more than ever, is the soundness of the author's judgment evidenced when he remarks, "I feel convinced by my own experience

---

(*a*) "Physical Diagnosis." By Richard C. Cabot, M.D., Assistant Professor of Medicine in Harvard University. Fifth edition. Royal 8vo. Pp. xxii. and 519, with five plates and 268 figures in the text. London: Bailliere, Tindall and Cox. 1913. Price 15s. net.

with tracings of the venous pulse and by my study of others' work with electrocardiograms that neither method is likely ever to be used by the practitioner for whom this book is intended." Hereupon follows an excellent critical summary of the results accomplished by these newer methods. The sections on blood pressure and the arrhythmias, as well as those on neoplasms of the lung and pleura, on subphrenic abscess and peptic ulcer have been recast, and X-ray examination of the stomach by the bismuth meal receives more adequate notice in this edition. The book is well and clearly printed in good type, but occasional errors are found—as in the spelling of the heading to Chapter VIII.—which appear to occur almost inevitably, despite the most careful revision of proof-sheets. A careful index is not the least valuable part of the book.

OPERATIVE SURGERY. (a)

MR. Binnie's "Operative Surgery" first appeared in 1905 as a comparatively small work in one volume, which at that time took no cognisance of operations on bones and joints. Later, Vol. II. was added; this dealt for the most part with the latter subject; and the present book, 8vo. in size, is the fifth publication of Vol. I., and the second of Vol. II., bound together as the fifth edition.

The work is conveniently divided into six parts. The first five of these discuss the surgery of the head and neck, the thorax, the abdomen, the uro-genital system, and in a more limited space that of the spine. Part VI., "Unclassified Topics," comprises the latter half of the work, and is devoted to abscesses, drainage, nerves, arteries, veins, bones and joints.

The writer's idea apparently is to make his work as modern as possible. He therefore does not include many of the older operations which are found in most systematic text-books. He has succeeded in producing what may be described as a valuable summary of surgical annuals. His judgment in selecting material is sound, and his general advice good. Some of his text and a number of his illustrations have been supplied to him by their original authors.

That the book has found a sphere of usefulness is apparent from the number of editions it has gone through in a comparatively short time. It is essentially a work for the junior surgeon, who must frequently meet difficult, and to him unusual cases, where he has to make up his mind which of a number of methods is the most suitable for his immediate purpose. Mr. Binnie describes a variety of procedures for each operation—not in a verbose manner, but clearly and concisely. Each operation is rationally divided into stages, the descriptions of which are printed in separate paragraphs as Steps 1, 2, 3, etc., so that one is likely to remember the sequence without undue effort. The work has also the advantage of being profusely and suitably illustrated to ensure clearness with the minimum of descriptive text.

Beside the fact already mentioned, that the work is now one large volume instead of two small ones, and that some fresh articles which have appeared during the last three years have been included to bring it up to date, the text of the fifth edition does not differ in the main from the previous ones. There are, however, over 100 additional illustrations, some of them coloured. Payr's operation for hydrocephalus, operations on the pituitary body, the injection treatment of tic douloureux, and many other points of *technique* are added. Some of these are still *sub judice*, others will at once appeal to the surgeon.

LEFTWICH'S TABULAR DIAGNOSIS. (b)

THIS collection of 350 tables of diagnosis by the author of the well-known "Index of Symptoms" offers great and obvious advantages to the busy practitioner, for whom the book has been written. The doctor who has been in practice for some years is likely at times to feel his deficiencies in diagnosis, and, since few can give adequate time for post-graduate classes or for systematic reading, some kind of book is required which will provide the knowledge desired with a minimum expenditure of time and trouble. For rapid reference there is nothing so serviceable as a classification in tabular form, and we can heartily recommend this book for its general utility. Each table is divided into three columns. In the first column appears the symptom, organ, or region, and in the other two the word or phrase which qualifies it. This arrangement not only lessens the amount of reading necessary, and consequently of time spent in consulting the table, but it has the added advantage that the reader in search of a particular symptom is able to find it at once by glancing down the first column. To make the work complete, several little-known signs have been inserted, and many of the less known diseases have been included. The tables are numbered and placed as far as possible in alphabetical order, and the book answers to various practical tests which have been applied. Perhaps in places details may be criticised, such as the table on page 269 of the signs of "phthisis, early," which, by the way, one would rather see styled "pulmonary tuberculosis, early," the signs given being those of already well-marked consolidation. Calmette's test, too, which has largely fallen into disuse, would be far better replaced by the subcutaneous tuberculin test, or failing this by Von Pirquet's cutaneous reaction, both of these latter having greater precision in diagnosis, with no likelihood of untoward results. If this work is consulted by those who realise that there is no "always" and no "never" in clinical medicine, the tables contained therein, though necessarily somewhat dogmatic, will be appreciated at their true value.

RESEARCHES IN COLOUR VISION. (a)

THIS valuable and interesting volume embodies the substance of the communications which its distinguished author has been making to the Royal Society during the past quarter of a century, or so, on a peculiarly important and very much debated—and disputed—subject of physical and physiological investigation. While it is all too true, indeed, as inquiring and conscientious readers have learned to their cost (in time and thought, strenuously laboured and so often wofully wasted), that "other theories of colour vision, physiological and psychological, have been offered to the Press"—and with persistent claims to the right of extinction of all rivals—Sir William Abney is still able to present a good case for the theory which he has himself championed so long and so faithfully. Accordingly, the principal inducement which led to the publication of the present volume—superadded to the requests of eager inquirers for collected copies of his valuable papers—was the laudably honest wish to demonstrate the persistent vitality of the trichromatic theory; which, as he says, with truth as well as with justly laudable pride, "does not yet require a funeral oration over its remains."

A seven-league stride in the expansion and strengthening of the basis of this physical theory was carried out by the author's elaborate (and necessarily, in the hands of a skilled and enthusiastic physicist, meticulously accurate) measurement of the three sensations produced by the respective spectral colours. Various problems, previously unsolved, have been quite satisfactorily determined by the data thus provided. With a dignified exclusiveness, which we feel bound to respect, the author has refrained from the criticism of rival theories; while accounting by means of his own physical theory, not only for colour sensations, but for the associated phenomena of colour blindness, colour fatigue; and the collateral phenomena of healthy and of defective function. And he recognises the limitations of his position with the intellectual precision of a philosopher, and the candour of a reliable scientific soothsayer: "The trichromatic theory offers the truth; but the physiologists must add their quota to it to make it the whole truth. There may be difficulties in welding together the physical and physiological aspects of colour vision to make a perfect theory, but it will be effected."

(a) "Manual of Operative Surgery." By John Fairbairn Binnie, A.M., C.M.Aberdeen, with 1,365 illustrations. Pp. x. and 1,153. London: H. K. Lewis. 1912. Price 30s. net.

(b) "Tabular Diagnosis: An Aid to Rapid Differential Diagnosis of Disease." By Ralph Winnington Leftwich, M.D., late Assistant Physician to the East London Children's Hospital. Pp. 359. London: Edward Arnold. 1913. Price 7s. 6d. net.

(a) "Researches in Colour Vision and the Trichromatic Theory." By Sir William Abney, K.C.B., D.Sc., D.C.L., F.R.S. With four coloured plates and other illustrations. Longmans, Green and Co.: London, New York, Bombay and Calcutta. 1913.

The author, wisely as well as modestly, avoids discussion of such matters as "some after-effects of light on the retina which, so far, do not lend themselves to exact measurement by physical means." Such discrimination surely does present an edifying contrast to the methods of the physiological, and the psychological, quack; each of whom we have had the painful experience of consulting in the effort—temporarily ineffectual, in greater or less degree—to expand the boundaries of our own little domain of optical-*plus*-ophthalmological enlightenment. Being human, he is, of course, inevitably open to the mental influences of the colouring media placed before the mind's eye; by the action of the "eidolon of the cave" within, and of that "of the market-place" without. Accordingly, we are not surprised to find the *ad hominem* argument or "it is hard to believe" brought up (even in the preface) to corroborate the apparent probability of the identity of the action of light on the retina with that which it produces on the inanimate photographic plate; while the author, like a truly philosophic judge, declines to make a definite ruling.

The introductory chapters, which deal with the basic data, are models of concentrated knowledge; and the descriptions of the physical apparatus employed, and of the various items of research carried out with their aid, are above all captious criticism. General questions, such as suggest themselves to every intelligent observer of nature, necessarily crop up in connection with discussion of the data afforded by the most enlightening of all the senses. The azure hue of the sky is one. Sir William Abney is disposed to believe "that the main sources from which the blueness is derived are dust and particles of water which are in a semi-vaporised condition. These would amply account for it. We have often good circumstantial evidence before us that such water particles will produce the effect." The author does not fail to refer to the blue haze in which distant hills are usually invested, and proceeds to point out that "When the atmosphere is moist, it is a matter of common observation that distant hills show their local colour, and stand out so that one can 'almost touch them.'" We hardly think that the expression "stand out" suits the phenomenon very well; the phraseology of the metrical "Prognostics of Rain," which were formulated by the poetic ancestor of the imaginative inventor of the evolutionary "Origin of Species," presents the physical change more vividly:—

> "Loud quack the ducks, the peacocks cry,
> The distant hills are looking nigh."

We would like to have Sir William Abney's explanation of the influence of the *size* of the floating water particles in the production of the telescopic effect which—like so many other of the familiar phenomena which have evermore been with us—remains still unexplained, and almost uncommented. The writer of this notice could not help recalling in this connection one of the items of inspired information conveyed to him on this head in the far-back days of his curriculum, when ozone was fairly young; and, like other impressive juvenilities, credited with many unverifiable powers. The University Professor of Chemistry (and F.R.S.) thought that the floating vegetable and marine matters in the atmosphere probably provided the permanent starch-iodine reaction. The Professor of Physics pointed out when consulted, and with explosive merriment, that under such influence the sky should be red!

But such comment is relatively trifling gossip—the reviewer must say something, critical or relevant (both or neither)—in the presence of a volume which we unhesitatingly pronounce to be one of the most important contributions to the science, and literature, and experimental art, of physiological optics that has appeared since the publication of the monumental work of Helmholtz. So we close this all too trifling notice with a cordial expression of thanks to Sir William Abney for the brilliantly intellectual treat which he has afforded us.

THE INSANITY OF GENIUS. (a)

The claim advanced by Dr. Hollander in his rather elaborated preface to this volume, that the late Mr. Nisbet "was a close observer of mind and character," seems to be fairly well borne out by an examination of his work. He was undoubtedly an enthusiast in his way. It might readily be surmised that the germ of this intellectual feature was supplied through contact with Dr. Hollander who informs us that: "He availed himself of my investigations into the functions of the brain"; and the inspiration of culture and development might provisionally be accounted for by intellectual "radiation." Anyway, the editor of this posthumous edition informs us—approvingly, of course—that the author "held that all manifestations of human activity—physical, moral and intellectual—have their *seat* in the brain and nervous system"; and we must point out at the start that the view thus summarised might easily have been expressed in phraseology more precise as to its ratiocination, and more accurate as to its grammar and diction. If the writer had substituted for the term "seat"—which we have purposely italicised—the other monosyllable, *source*, the position so defined could be much more readily defended. Nor do we appreciate very highly the suggestion of impregnability of another logical position—inclusive of an assumption—which Dr. Hollander immediately afterwards proceeds to occupy: "Genius is nearly always limited to the predominance of one or more brain-powers. Could this be if the brain had not multiplex functions?" On the other hand, however, we cordially sympathise with his appreciation of the work of Gall, and his lofty estimate of the personality and achievements of that enthusiastic pioneer of modern neurology, whose publications have, ever since their appearance, been utilised as the great quarry of "original" discovery by the smuggling and looting (and less honourable) Dick Turpins of the rugged and thorny pathways of neural anatomy and physiology. He anticipated, by suggestion and experiment, the differentiation of motor and sensory nerve-roots and paths of conduction, which constituted the famous *discoveries* of Sir Charles Bell; and definitely localised the primordial motor centre of the cerebral cortex, which in time came to be known—with the usual irony of reputation, scientific and other—as "Broca's space." A good illustration is surely found in the record of Franz Joseph Gall of the truth of the bitter cynicism enunciated by Jonathan Swift—whose *sæva indignatio* was, all too obviously, evolved from his own personal experience: "Whenever a true genius appears in the world, you may always know him by this sign, that all the asses are arrayed in confederacy against him."

We must say, in conclusion, that we have nowhere failed to find the contents of this volume highly suggestive, even where not quite reliably instructive; and on that account (even alone) we do not hesitate to affirm that it thoroughly deserves the popularity which it has obviously succeeded in securing.

MEDICAL NEWS & PASS LISTS.

The Royal College of Surgeons of England.

At a quarterly meeting of the Council of the Royal College of Surgeons last week, with Sir Rickman J. Godlee, President, in the chair, Mr. J. Ernest Lane, Mr. L. A. Dunn, Mr. Jonathan Hutchinson, and Mr. H. J. Waring, the four Fellows recently elected, took their seats as members of the Council.

Sir Rickman J. Godlee was re-elected President and Mr. G. H. Makins, C.B., and Sir Frederic Eve were elected Vice-Presidents of the College. Sir Frederic Eve was also elected a member of the Executive Committee of the Imperial Cancer Research Fund, and

---

(a) "The Insanity of Genius and the General Irregularity of Human Faculty physiologically Considered." By J. F. Nisbet. With a preface by Bernard Hollander, M.D. Pp. 341. London: Stanley Paul and Co. Price 5s. net.

Mr. R. Clement Lucas was appointed the representative of the college on the Council of the Queen Victoria's Jubilee Institute for Nurses. The Council elected the following professors and lecturers for the ensuing collegiate year:—Hunterian Professors—Mr. Arthur Keith, Mr. Hastings Gilford (Reading), Mr. C. Mansell Moulin, Mr. E. W. Hey Groves (Bristol), Mr. A. R. Short (Bristol), and Mr. H. B. Whitehouse (Birmingham); Arris and Gale Lecturers—Mr. F. Wood Jones and Mr. David Waterston; Erasmus Wilson Lecturer—Mr. S. G. Shattock; Arnott Demonstrator—Mr. Arthur Keith; and Odontological Demonstrator—Mr. J. F. Colyer.

The following members of the college were admitted Fellows:—P. S. Foster, M.B., L.R.C.P., Otago Univ. and London Hosp., and P. H. Mitchener, M.B.Lond., L.R.C.P., St Thomas's.

The following were admitted members:—G. H. Alabaster, Birm. Univ.; P. H. Berry, B.A.Camb., Guy's; D. V. Pickering, B.A.Camb., Guy's; and T. O. Williams, Liverpool Univ.

G. C. Gell, Middlesex and R. Dental Hosps., was admitted a Licentiate in Dental Surgery.

The Council passed a resolution expressing deep regret at the death of Sir Jonathan Hutchinson, past president of the college, and recording their "appreciation of his untiring industry, the extent and accuracy of his observations, his eminence in many of the special departments of surgery, and the important discoveries which will always be associated with his name."

It was decided to publish a revised edition of the Museum Guide with additional illustrations.

University of St. Andrews.

The following have obtained the M.B. and the Ch.B. degrees, having passed the final examination in Medicine, Surgery and Midwifery:—David A. D. Kennedy, David Matthew, Robert Nicoll, William B. Patterson, Ruth E. Proctor, John C. Robertson, Jessie M. Valentine.

The Closing of King's College Hospital.

At midnight on Monday last King's College Hospital closed its doors. It reopens at Denmark Hill in October, where there will be 600 beds, in place of 250 beds at the old building near the Strand.

Earlier in the evening there was a reunion of old and present students, which was followed by a supper and a concert, at which Professor Urban Pritchard presided, and in giving the toast, "The Old Hospital and the New," he spoke of the enormous advance of medicine and surgery since he was first associated with the hospital 50 years ago. King's College had always been great on surgery, and it had also been the first hospital to have special departments. The formation of special departments was the death-blow to the old building, for they were constantly asking for more beds.

Mr. W. Smith (Chairman of the Hospital) said that although that celebration was partly one of sadness, yet it was also one of great hope for the future.

Sir W. Watson Cheyne, an old student, also spoke.

The Australian Institute of Tropical Medicine.

The Australian Institute of Tropical Medicine at Townsville. Sydney, which was founded as the result of an amalgamation of the schemes of Professor Anderson Stuart, of Sydney, and of the ex-Bishop of North Queensland, and now mainly supported by the Commonwealth, was recently opened by Sir William Macgregor. The Institute is working at the possibility of peopling Northern Australia with a working white population. The Australian Universities, in conjunction with the Institute, grant a diploma in tropical medicine.

Child Protection Congress.

The International Congress for the Protection of Children will be held in Brussels from July 23rd to July 26th, under the patronage of the King and Queen of the Belgians, with M. Adolphe Prins, Professor at Brussels University, as President. The Organisation Committee includes: For Great Britain—Alderman Benjamin Broadbent, M.A., J.P., Huddersfield, President of the Public Health Union; Dr. MacCleary, M.D., D.P.H., Medical Officer of Health, London; Mr. J. Courtenay Lord, Chairman of the Children's Court, Birmingham; and Sir Evelyn Ruggles-Brise, K.C.B., President of the English Prisons Board. The Congress will discuss reports on the competency of children's courts, the organisation of surveyed release, abnormal children, natural children, guardianship, statistics, vulgarisation of hygienic proceedings and of puericulture notions, the protection of children and alcoholised childhood.

Benefactions to the Hospital for Special Diseases, Cambridge.

The Treasurers of the Cambridge Research Hospital for Special Diseases have received the sum of £300 from Mr. G. P. Bidder, of Trinity College, for the purchase of an additional acre of land, and a promise of £300 from Mr. J. H. Wills, of Chiddingstone Castle, Kent, for current expenses.

Royal Hospital for Incurables, Dublin.

Mr. Wm. Fry, J.P., presided last week at the annual meeting of the Royal Hospital for Incurables, Donnybrook. Mr. J. J. Thompson, Registrar, read the annual report, which stated that, large as was the institution, the Governors were forced to admit that in undertaking the care and support of 213 inmates they were only affording relief to a comparatively small number of those seeking admission. Last year the number of admissions was only a shade over one-fourth of the number of applicants. For some time past the Governors had under consideration the reconstruction of the oldest portion of the hospital, and when the additions and alterations were completed the hospital would be capable of accommodating comfortably 248 patients instead of 213 as at present. The receipts from subscriptions and donations for the year were £1,484 0s. 1d., as compared with £1,359 2s. 6d. Life Governors' payments showed a marked decrease—£378, as against £893, and bequests amounted to £593 16s. 7d., as compared with £7,175 18s. 8.

The Chairman said the Governors felt that something should be done to extend the beneficent operation of the hospital, and accordingly instructions had been given to prepare two new wings, to contain 70 beds. The Lord Lieutenant had promised to lay the foundation-stone of the new buildings on Saturday afternoon, August 30th next, and he would on that occasion be accompanied by the Countess of Aberdeen, who had done so much for hospitals in Ireland.

Universal Esperanto Medical Association.

The Organising Committee of the 17th International Medical Congress has granted the use of the Geological Laboratory in the Royal School of Mines for the meetings of the Universal Esperanto Medical Association (Tutmonda Esperantista Kuracista Asocio). The meetings will be opened by a series of short lectures in many languages on "Esperanto and the Medical Profession." Subsequently only Esperanto will be used. Intimations of papers have already been received from Professor Sims Woodhead, Dr. Nemser (St. Petersburg), Dr. Sidlovskij (Moscow), "La rezultato de la enketo pri nesukcesantaj infanoj de Moskvaj urbaj lernejoj"; Dr. Robin (Warsaw, "Pri la sondado de la duodeno"; Dr. F. W. Alexander (London), "Sanigado per marakvo kaj elektro." Others are expected. The London Esperanto Club kindly invites all Esperantist medical men to a *conversazione* and concert in St. Bride's Institute, Ludgate Circus, on Friday evening, August 8th, at 7.45. Those intending to be present at the meetings should send their names to the President of the Association, Mr. G. Jameson Johnston, F.R.C.S.I., 13 Lower Fitzwilliam Street, Dublin. The usual annual congress will take place in the University of Bern in the last week of August during the Ninth Universal Esperanto Congress.

Queen's University ot Belfast.

The following degrees were conferred on July 9th, 1913, Lord Shaftesbury, Chancellor, presiding:—

M.D. (by Thesis).—George Cooper, Joseph G. Johnston, George E. A. Mitchell.

M.Ch. (by Thesis).—Andrew Fullerton.

M.B., B.Ch., B.A.O. (Honours, Second Class).—Nathaniel Beattie, William A. L. Dunlop, Thomas W. G. Hogg, Thomas Walker. Pass: James S. Bellas, David Calwell, John F. Craig, Herbert Emerson, Henry P. Hall, Herbert M. Jackson, Gordon D. Latimer, John B. Lyle, William J. M'Cracken, Wm. M'Kim H. M'Cullagh, John J. H. Mitchell, Joseph Porter, Hugh A. Skillen, William Speedy, William Tyrrell, Thomas H. Wilson, Samuel J. Yeates.

Diploma in Public Health.—William K. Calwell, Frederick W. Craig, Thomas F. S. Fulton, David G. Gray, Richard M'Candless, William B. Purdon, James J. Robb, William B. Stevenson, Robert S. Taggart, Eustace Thorp.

FACULTY OF MEDICINE.

Scholarships.—At Third Medical Examination: A. Porter, £40; Elizabeth Walker, £30; E. G. B. Calvert, £20; R. L. Rea, £15. At Fourth Medical Examination: W. A. L. Dunlop, £30; T. W. G. Hogg, £30; Thomas Walker, £30; Nathaniel Beattie, £20.

Class Prize List—Session 1912-1913.

Anatomy.—A. C. Dickey, R. J. Rea, M. G. Thompson, J. P. M'Ginley.

Elementary Anatomy.—J. S. Smyth, H. Wild, J. Lascelles, Margaret Crawford.

Practical Anatomy.—Junior: S. J. Smyth, Dorothy I. Dobbin, Mary I. Adams, M. H. Turnbull, Margaret Crawford. Senior: J. P. M'Ginley, H. E. Magee, A. C. Dickey, J. H. B. Hogg, M. G. Thomson, D. R. Wheeler, J. H. Vance.

Physiological Chemistry.—O. M. Anderson, D. Mitchell and C. Pedlow, 1st prize; D. R. Wheeler, C. A. Whitfield, M. S. Purce.

Chemistry (Theoretical).—S. J. Smyth, S. Lees, M. Goldblatt, H. Graham, C. J. A. Woodside.

Chemistry (Practical).—H. W. Wild, S. J. Smyth, H. Graham, C. J. A. Woodside, M. Goldblatt.

Experimental Physics.—S. J. Smyth, W. Gilmore, G. H. Davis, M. H. Turnbull.

Physiology.—M. Georgina Thompson. R. J. Rea, H. E. Magee, D. Mitchell, Arabella C. Kirker, C. A. Whitfield.

Medicine.—W. J. Lascelles, E. B. Mayrs, A. Fullerton.

Surgery.—E. B. C. Mayrs, Elizabeth Robb, A. Fullerton, W. R. E. Wilson.

Midwifery.—Elizabeth Robb, A. Fullerton, Margaret Gorman, B. Lyons, W. R. E. Wilson, E. B. C. Mayrs, R. N. M'Kinstry, W. S. Lynd, W. S. B. Hay.

Pathology.—Mary A. Gallagher, W. T. M'Curry, E. G. B. Calvert, R. L. Rea, J. A. Watson.

Materia Medica.—A. Porter, E. G. B. Calvert, Elizabeth Walker, J. A. Watson, Mary Gallagher.

Hygiene.—A. Porter, Elizabeth Walker, E. G. B. Calvert, T. W. Elliott.

Organic Chemistry.—Eliza E. Ross.

FACULTIES OF SCIENCE AND MEDICINE.

Zoology (Practical).—C. J. A. Woodside, M. H. Turnbull, S. J. Smyth, S. Lees, J. Lascelles.

Zoology (Lectures).—C. J. A. Woodside, S. J. Smyth, S. Lees, S. J. Crawford, Annie E. E. Beattie.

Botany (Theoretical).—S. J. Smyth, S. Lees, C. J. A. Woodside, W. Gilmore, J. Lascelles.

Anatomy.—A. C. Dickey, H. E. Magee, M. G. Thompson, J. P. M'Ginley, D. R. Wheeler.

Botany (Practical).—C. J. A. Woodside, Annie E. E. Beattie, T. F. Ingram, W. Gilmore, S. J. Smyth.

Histology.—Margaret S. Purce, Arabella C. Kirker, W. Napier, M. G. Thompson, A. C. Dickey, J. P. M'Ginley.

Practical Pharmacy.—David Corry, W. A. Thompson, Mary A. Gallagher, Sylvia Marsh.

Medical Jurisprudence.—E. G. B. Calvert, Elizabeth S. Walker, A. Porter, W. Russell.

Operative Surgery.—G. Purce, S. Miller, Margaret Gorman, Elizabeth Robb.

University of Bristol.

The following candidates have passed the Second Examination for the Degrees of M.B., Ch.B.—Herbert Archer, Oliver C. M. Davis.

University of Edinburgh.

The following medical awards are announced:—

Thesis Gold Medallists.—O. H. Blacklay, M.D., W. E. Bullock, D.Sc., M.D., A. P. Mitchell, M.D., Ch.M., G. M. Robertson, M.D., and G. D. Whyte, M.D.

Goodsir Memorial Fellowship.—F. G. Bell, M.D., Ch.B.

Ellis Prize in Physiology.—W. E. Bullock, B.Sc., M.D.

Gunning Victoria Jubilee Prize in Physiology.—Marjory Macnaughton, B.Sc.

Ettles Scholarship.—J. N. J. Hartley, M.B., Ch.B.

Allan Fellowship in Clinical Medicine and Clinical Surgery.—E. W. Adcock, M.B., Ch.B.

Freeland Barbour Fellowship.—T. D. Inch, M.B., Ch.B.

M'Cosh Graduate's and Medical Bursaries.—D. C. Barron, B.Sc., M.B., Ch.B.

Mouat Scholarship in the Practice of Physic.—D. Martin, M.B., Ch.B.

Buchanan Scholarship in Gynæcology.—J. N. J. Hartley, M.B., Ch.B.

James Scott Scholarship in Midwifery.—T. Pullar, M.A., M.B., Ch.B.

University of Aberdeen.

At the graduation ceremony on July 8th the following Degrees in Medicine were conferred:—

Degree of Doctor of Medicine (M.D.).—James L. Gordon, M.B., C.M., William K. Irwin, M.B., Ch.B., John Inkster, M.B., Ch.B., James A. M. Clark, M.B., Ch.B., Clarence Ed. Greeson, M.B., Ch.B., Robert W. Macpherson, M.B., Ch.B., George C. Soutter, M.B., Ch.B.

Degree of Master of Surgery (Ch.M.).—Francis W. Stuart, M.B., Ch.B.

Degrees of Bachelor of Medicine (M.B.) and of Surgery (Ch.B.).—**George Riddoch, with first-class honours. Ordinary Degree: Alexander L. Aymer, Hamish D. F. Brand, William H. Brodie, Francis F. Brown, James T. Cameron, Francis J. R. Cowie, *William I. Escoffery, Winniefred M. Gray, M.A., *James M. McLaggan, George Pirie, Frederick Ritchie, *Robert S. Snowie.

**Passed Fourth Professional Examination with "Much Distinction."

*Passed Fourth Professional Examination with "Distinction."

The John Murray Medal and Scholarship (awarded to the most Distinguished Graduate (M.B.) of 1913) to George Riddoch.

The George Thompson Fellowship to Martin M. Cruickshank, M.B., Ch.B., B.Sc.

Diploma in Public Health (D.P.H.).—*Alexander M. Brown, M.B.Aberd., Elizabeth M. Edwards, M.B.Aberd., William A. Mearns, M.A., M.B.Aberd., Robert W. S. Murray, M.B.Aberd., *Robert Richards, M.B.Aberd., John Ritchie, M.D.Aberd.

*With credit.

Conjoint Examinations in Ireland.

The following candidates have passed the First Professional Examination of the Royal College of Physicians and the Royal College of Surgeons.—Arthur Briscoe, Moses Briscoe, Maurice J. Broderick, J. J. Crowe, Francis Daly, William Evans, J. Holland, Henry Hurst, Thomas P. MacDonnell, George F. Maher, Denis B. McEniry, Harold I. Mooney, B. J. Mulligan, Michael J. O'Connor, Marks M. Price, George C. E. Roe, James F. Seale, James G. Thornton, D. E. Young.

Second Professional Examination.—W. G. Thompson (honours), Miss Elizabeth Budd, John Coffey, B. J. Daunt, M. Dockrell, John A. Fretton, J. J. Hayes, B. Hirson, James McGuire, J. A. McKinnon, Miss Marjorie McMullen, Thomas Moore, Thomas F. Moran, J. F. O'Mahony, J. P. Pegum, Patrick K. I. Ryan.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

MR. R. SOAMES (Devon).—The flour of the soya bean is sufficiently poor in carbohydrates to render it useful for making bread, cakes, etc., for diabetic patients. It contains a good deal of oleaginous matter which does not become rancid on keeping for some time.

DR. ALEXANDER HAIG'S MELABOLISM THEORIES.

A Bournemouth correspondent writes to remind us that from time to time we have published articles on diet and metabolism in this journal. For many months he has been in close touch with Dr. Alexander Haig and has learnt much of great value from him. Very many practitioners are not aware how much they are losing by not studying his writings and attending his demonstrations. He is widely misunderstood. To begin with his is not a low proteid diet and he points to members of the ape tribe as examples of the enormous strength that can be built up on nuts and fruit. Fred Welsh, the champion boxer, who makes mincemeat of his most powerful opponents, lives on a diet akin to Haig's.

DUM SPIRO, SPERO (Hunts).—Careful articulation after a deep inspiration, or singing the words and then saying them directly afterwards in front of a mirror will do much to overcome the unfortunate habit of stuttering. Patience and perseverance are the keynote of success in the treatment of this form of speech defect. Attention must be paid to the general health at the same time.

Appointments.

CHAPPLE, HAROLD, M.B., M.C.Cantab., Obstetric Surgeon to Guy's Hospital.

DEPREE, H. T.,. M.B., B.C.Cantab., Honorary Anæsthetist to Guy's Hospital.

EDINGTON, G. H., M.D.Glasg., D.Sc., F.R.F.P.S.Glasg., Visiting Surgeon to the Western Infirmary, Glasgow.

FAWCETT, JOHN, M.D.Lond., F.R.C.P.Lond., Physician to Guy's Hospital.

FINLAY, D. E., M.B., B.S.Lond., Certifying Surgeon under the Factory and Workshops Acts for the Gloucester District of the County of Gloucester.

HUNT, G. H., M.B., B.Ch.Oxon., Fifth Assistant Physician to Guy's Hospital.

LANCASTER, H. F., M.D.Brux., L.R.C.P.Lond., M.R.C.S., Consulting Anæsthetist to Guy's Hospital.

SOAMES, RALPH M., M.B.Cantab., M.R.C.S., L.R.C.P.Lond., Tuberculosis Medical Officer for the county of Surrey.

TRETHOWAN, W. H., M.B., M.S.Lond., Orthopædic Surgeon to Guy's Hospital.

Vacancies.

Enniskillen Union, Lisbellaw Dispensary District.—Medical Officer. Salary £100 per annum, and Medical Officer of Health, salary £10 per annum, together with Registration and Vaccination Fees. Applications to Richey Wilson, Clerk of the Union. (See advt.)

Enniskillen Union, Tempo Dispensary District.—Medical Officer. Salary £100 per annum, and £14 per annum as Medical Officer of Health, together with the usual Registration and Vaccination Fees. Applications to Richey Wilson, Clerk of the Union. (See advt.)

House of Recovery and Fever Hospital.—Junior Assistant Medical Officer. Salary £50 per annum, and board. Immediate application to the Medical Superintendent. (See advt.)

Horton Infirmary, Banbury.—House Surgeon. Salary £100 per annum, with board and residence in the Infirmary. Applications to E. Lamley Fisher, Hon. Secretary, Horton Infirmary, Banbury.

Johannesburg Hospital, Johannesburg, South Africa.—Non-Resident X-Ray Medical Officer. Salary £750 per annum, with the right of private practice. Applications to Dr. Lewis Jones, 143 Harley Street, London, W.

Kent County Asylum, Chartham, near Canterbury.—Third Junior Assistant Medical Officer. Salary £220 per annum, with furnished apartments, lighting, heating, attendance, laundry, milk, and garden produce. Applications to Medical Superintendent.

Lincoln Mental Hospital, The Lawn, Lincoln.—Assistant Medical Officer. Salary £150 per annum, with board, etc. Applications to Dr. Russell, Medical Superintendent.

Whittingham County Asylum, Preston, Lancs.—Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Births.

ANDREW.—On July 4th, at Lynton, Leiston, Suffolk, the wife of H. T. Andrew, M.B., of a son.

BENTALL.—On July 10th, at 13 Roe Lane, Southport, to Dr. and Mrs. Bentall—a son.

FOSTER-BARHAM.—On July 5th, at Horton Lane, Epsom, the wife of G. Forster-Barham, M.D., of a daughter

JEUDWINE.—On July 9th, at 7 Brooklands, Filey, the wife of Capt. W. W. Jeudwine, I.M.S., of a son.

MCLEAN.—On July 12th, at Bay View, Rushbrooke, Co. Cork, Ireland, the wife of W. McLean, M.R.C.S., L.R.C.P.Lond., Medical Inspector Board of Trade, of a daughter.

PRINGLE.—On July 13th, at 195 Croydon Road, Anerley, the wife of Ernst George Pringle, M.D., of a daughter.

Marriages.

DIXON—ALLEN.—On July 5th, at Christ Church, Sutton, Surrey, Robert Halstead Dixon, M.B.Lond., of Ealing, son of Robert Dixon, of Truro, to Edith Kate, only daughter of the late George Allen and of Mrs. Allen, Farringford, Sutton, Surrey.

HALL—MEIN.—On July 10th, at Jesmond Church, Newcastle-on-Tyne, George Hall, M.D., B.Sc., M.R.C.P., 9 Ellison Place, only son of Mr. and Mrs. M. Stokoe Hall, to Margaret, elder daughter of Mr. N. Mein and the late Mrs. Mein.

Deaths.

JOHNSON.—On July 8th, after a long illness, at 57 Talbot Road, Bayswater, W., William Alfred Johnson, M.D., L.R.C.P., L.S.A.Lond., member of the General Council of St. Andrews, youngest son of the late Edward Johnson, M.D., of Umberslade Hall, Warwickshire, aged 84 years.

MABERLY.—On July 6th, at Kingsway, Burnham, Somerset, G. F. Maberley, M.R.C.S., in his 90th year.

MCCASKIE.—On July 7th, at Southport, Norman McCaskie, M.D., aged 64.

OPERATIONS—METROPOLITAN HOSPITALS.

WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m., London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopædic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Gt Ormond Street, (9.30 a.m.), Gt. Northern Central (2.30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College 2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynæcological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan 9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopædic (2.30 p.m.), Soho Square (2 p.m.).

SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St George's (1 p.m.), St. Mary's (1 p.m.) Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. George's (2 p.m.), St. Mary's (2.35 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), Chelsea (2 p.m.) Samaritan (Gynæcological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopædic (2 p.m.), City Orthopædic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).

TUESDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Ear (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m., Throat, Golden Square (93.0 a.m.), Soho Square (2 p.m.).

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, JULY 23, 1913. No. 4.

NOTES AND COMMENTS.

A Medical Poet Laureate.

MEMBERS of the medical profession have at various times taken a place in the front ranks of art and literature. Poetry is one of the emotional gifts that might well receive stimulation from the intimate contact with the facts of life and character that forms part and parcel of the daily routine of a doctor's existence. As a matter of fact, there have been many poets in our profession, the most distinguished amongst them being Keats. The crown of the laureateship, however, has not hitherto fallen to the lot of any of them, a fact that may be taken to imply not so much that their poetry has fallen short of the true æsthetic standard as that their voices may not have caught the popular and the official ear at the moment when time and circumstance have demanded the filling of a vacant laureateship. Be that as it may, the world of medicine may now boast its Poet Laureate in the person of Mr. Robert Bridges, whose appointment by the King has just been gazetted. He was born in 1844 and educated at Eton and Oxford. Later he studied medicine at St. Bartholomew's and took the degree of M.B.Oxon. in 1874, and the diploma of Fellow of the Royal College of Physicians of London in 1900. He held the posts of Assistant Physician to the Children's Hospital in Great Ormond Street, and of Casualty Physician at St. Bartholomew's. He retired from the practice of his profession in 1882 and devoted himself to poetry. His work, although little known to the public, is held in high esteem by competent judges. His publications include eight poetic dramas, various shorter poems and sonnet sequences, of which the most notable are "The Growth of Love," and "Eros and Psyche," and a masque entitled "Demeter," which has been performed at Oxford. A collection of his works has been recently published.

A Fighting Medical Officer.

THE Medical Officer of Health for Ilford, Dr. Cornelius F. Stovin, in the discharge of his official duties, has brought the sanitary administration of his district prominently before the gaze of the public. He had some personal differences with the Borough Council, and these were at length subjected to the ordeal of a Local Government Board inquiry. From the facts disclosed, it appears that Dr. Stovin presented an annual report to the Council to which he added in its final published form a considerable amount of matter that had not been originally submitted by him. A course of that kind not unnaturally excited a good deal of comment, and is not of the kind that would be commended as an example to other medical officers of health. Fortunately, however, the point seems to have been waived by the Ilford Council, and their differences with Dr. Stovin appear to have been amicably settled. The chief grievance of the latter, so far as can be gathered from the reports of the Government Inquiry, seem to have been certain drainage defects that were not dealt with by the sanitary authority on his representations. All's well that ends well. Dr. Stovin has had the courage of his convictions, he has fought for a sound cause, and his methods, even if somewhat quixotic, have apparently been crowned with success.

A Bogus Medical Practitioner.

LAST week, at Glasgow Assizes, one Richard Harrison was sentenced to twelve months' imprisonment for having given a death certificate purporting to be from a registered medical practitioner, he being unregistered under the Medical Act. Prisoner had acted at Swindon as an unqualified medical assistant to a Dr. A. P. Walters, a name which he assumed at Treforest, when he signed the death certificate on which the criminal charge was based, as "M.R.C.S. and L.R.C.P." From statements made in Court it seems that there were other charges outstanding against the prisoner, who was of drunken habits. It was proved by the police that in 1900 he was at Bromsgrove, afterwards at Aberavon, and finally at Pontypridd in 1905. There was a conviction against him at Maidstone for a similar offence. Such being the case, one may well wonder why the police should permit so notorious an offender to wander from place to place and settle down to his nefarious practice in fresh quarters. The fact of the matter, as it has often been pointed out in these columns, is that the control of quacks and quackery is very much in the hands of the police of the United Kingdom. Given the intention and the requisite driving power they could speedily rid the nation of these undesirable rogues and vagabonds. When the police take action, as they do on rare occasions, it is almost always against some unfortunate medical man who has been unfrocked, or someone who has acted as unqualified medical assistant. The quack who has no shred of medical knowledge or training is infinitely safer than either of the two foregoing offenders from the attentions of the police, no matter how gross his claims or how unbridled his cruelty and rapacity. It is not unlikely that existing laws provide ample machinery for suppression by the police of medical quacks and quackery.

The Wording of Medical Certificates.

IN accordance with the best traditions of the profession, it has been the custom on the part of medical men not to give the name of a disease from which a patient is suffering upon any medical certificate, except that used for death, where it is felt that this would be prejudicial to the patient's interests. It cannot be necessary that employers should always know the exact nature of any malady with which an employee is affected, any more than other private personal details regarding him. The two vital questions are, "Is the illness contagious?" and "Does it incapacitate the employee from work?"—briefly to answer which is all that is required in the majority of cases. To divulge the nature of a disease might be highly detrimental to the worker, and it would be contrary to the established ethics of medical practice. It is satisfactory, therefore, to note that the Lancashire Insurance Committee have recently effected a compromise with medical men on the panels in agreeing to accept the word "illness" on certificates instead of the name of the disease in those cases which the medical attendant considers exceptional. Apart from the ethical aspect of the question, this move will tend towards the prevention of verbal inaccuracy. Medicine is not an exact science, and it is not always possible to make a correct diagnosis upon the first examination of a patient. To compel medical men to state the nature of the disease at once is simply to crush all spirit of scientific investigation and to encourage slip-shod methods. It is to be hoped that the example of the Lancashire Insurance Committee may be copied by other authorities throughout the country.

The Future Site of London University. During the past week the pros and cons of the future site of the University of London have been vigorously discussed. Two sites only seem to have been seriously considered by the Senate. The first is the one at Bloomsbury, near the British Museum. The chief objections seem to be its inadequate size and its huge cost. The other site is that on the south side of the Thames, east of the palatial hall now being built for the London County Council. This situation is warmly advocated by the Council, which, as the educational authority of London, naturally has a considerable voice in the matter, besides which it will have to find some of the purchase money. The crucial objection to the south side of the Thames is its aloofness from the hub of the metropolis. It is to be hoped that the Senate will not come to any hurried decision. There is a third site which appears to have escaped the notice of the *Times* and the other London newspapers in some inexplicable way, namely, that of the Foundling Hospital, which will shortly become vacant, owing to the removal of the children to country quarters. This site is ample in size, it is central in position, and if only the purchase money could be raised London could be put in possession of a home worthy of her academic Alma Mater. It is to be hoped that the advantages of the Foundling Hospital site will be laid before the public and considered by the Senate at least as fully as those of the British Museum and the Embankment.

LEADING ARTICLES.

SUGGESTED REFORMS IN THE BRITISH MEDICAL ASSOCIATION.

In spite of various vicissitudes of fortune, the British Medical Association remains the established centre of organisation of the medical profession. After all said and done, it constitutes our main hope, as it is our chief stimulus for future progress in the consolidation and protection of professional interests, as well as in the furthering of scientific information. Like all human institutions, the Association has its defects, and it is well to recognise that its future strength must to a great extent depend on the candour with which self-criticism and suggestions for reform are examined. In a spirit of entire friendliness, therefore, certain points of policy advanced by what may be termed the advanced wing of the Association may be briefly noticed. The tenour of these proposals may be gathered from the instructions to representatives of the Brighton meeting, which appeared last week on the agenda of the Marylebone Division of the Metropolitan Counties Branch of the Association. The first dealt with a suggested increase of subscription. Many members hold that it was a mistake to increase the original subscription from one guinea to twenty-five shillings, and that any further increase is to be deprecated. What value does a member get for his money? He has a weekly journal of portentous size, but that is surely a self-supporting property to which he is entitled to look for huge profits to the corporate income. He has the privilege of belonging to a branch and of attending the annual meeting, and his general interests are defended by the Council of the Association; there is also the use of a library and central London offices. He does not, however, obtain the advantages of individual protection against the legal complications incident to his profession. The question of the increase of fee opens up the financial aspects of the case, which obviously lie at the root of the whole matter. This is more directly approached in the second item, namely, "the necessity for decreased expenditure." The finance of the Association, in our opinion, requires careful expert inquiry, with a view to increased economy, especially in the conduct of the journal. The latter is a magnificent journalistic property which in private hands would be made to yield a far larger profit than it does under present conditions. The journal, in point of fact, should suffice in itself to sustain the cost of various developments in favour of members. The formation of a new company, which is next raised, suggests the spirit of unrest that has undoubtedly permeated the profession to a large extent during the past few years. Presumably it is proposed to reconstitute the existing company on broader lines rather than to form a brand new corporation. Next comes the resignation of representatives, doubtless an outcome of the Insurance Act disputes. It seems clear that some means of enforcing an automatic resignation is needed when a representative is absolutely out of touch with his constituents. Then the question of a Central Defence Fund is brought forward. That a large reserve of the kind should be in the hands of the Association to meet emergencies is clearly of vital importance. How it is to be raised is a different matter, but we adhere to the question that under economic management the journal of the Association should be able to provide all the necessary funds. The sixth item is "the formation of a trades union." There could hardly be a surer token of the rapid changes that have taken place in the professional attitude with regard to social matters than the deliberate proposal to form a trades union. It apparently registers an advance in a commonsense handling of the economic side of professional life, an aspect that must in the long run be forced remorselessly upon all human enterprises. Dr. F. J. Smith, whose name is now inseparably connected with thorough and enlightened reform, suggests that each division should have power to refer any question to a postal vote within its boundary. Clearly, any proposal that renders representation more direct and more authoritative deserves careful attention. The eighth item is the "reform of the constitution." It is well that this question should be brought forward at Brighton. The recent experiences during the passage of the Insurance legislation have shown the administration of the Association to be cumbrous, slow, and to a large extent irresponsible. It should not be beyond the wit of the Association to frame a constitution under which it would be impossible for administrative control to drift into the hands of a few individuals. In other words, the government of the Association should be democratic, directly representative and responsible to its constituents. The final clause in these "instructions" deals with the inevitable Insurance Act, which need not be considered here. The rest of the items, as readers will recognise, raise matters of vital importance to the present and future welfare of the British Medical Association, and it is to be hoped they will in due time reach a wise and final settlement.

THE PROFESSION IN IRELAND.

The delegates' meeting held last Thursday in the Royal College of Surgeons was, we are glad to say, thoroughly representative. This was the first essential for the foundation of a successful organisation. In the next place, an executive committee was constituted which may prove to be the strongest which has yet acted for the profession. At any rate, it is the most democratic and the most directly representative. To begin with, the over-representation of the two larger associations—the British Medical and the Irish Medical—has been cut down to an equality with that of the various smaller societies and of the universities and medical corporations. Each of these bodies is, in future, to nominate one member of the executive committee. The strongest point of the constitution, however, is the fact that every county area in the country is to send one representative. The larger towns are to have increased representation. This introduction on a large scale of the principle of direct representation will have two good effects. It will increase the sense of responsibility of the members of the committee, and it will give the profession of every district a direct voice in all discussions and decisions. By this means the committee will be in a strong position to gauge professional feeling on every point that arises. It need hardly be said that in the elections and nominations that will take place in the next few weeks, great care will be required. We want not merely strong men, but cool men. The noisiest in a public meeting is not necessarily the wisest. The committee is likely to have more important questions to deliberate on than the Irish profession has ever yet had to face. Men of various qualities and opinions are required, for only so can the general voice of the profession make itself heard. So far, we have not referred to the one weak point in the new constitution—the question of finance. Up to the present, almost the entire expense of organisation has been borne by two bodies—the two larger associations. It is more than doubtful whether either of these can contribute in the future. It is all but certain that the British Medical Association has not the power to do so. Unless, therefore, the members of the profession determine to shoulder the burden themselves, the whole organisation will come down like a house of cards. The sum required is not large. Eight hundred or a thousand a year would be ample. It is extraordinary, however, how careless members of the profession are of their own interests, and unless the matter is taken up determinedly all through the country the fight cannot be carried on.

CURRENT TOPICS.

The Mount Vernon Hospital Staff Resignations.

On Thursday last a telephone message reached the office of the Medical Press and Circular from a firm of solicitors, which was duly received by a junior clerk in the absence of the manager. The senders asked the clerk peremptorily for the name of the writer of the article upon Mount Vernon Hospital in our issue of the 16th. This extraordinary telephonic request coming from a firm of solicitors obviously contemplating a libel action was naturally declined. Later in the day, on being rung up by our manager, the solicitors repeated their demand for the name of the writer, which was again refused with a suggestion that the proper course for a firm of solicitors to pursue under such circumstances was to communicate in writing. On Friday we received a letter from them, saying that their clients, the Committee of Management of Mount Vernon Hospital, considered they had been "grossly outraged" by the article in question, and "that a paper claiming to influence the minds of others should be fair and accurate in the statements which are permitted to be made in its columns." To that letter we sent an immediate reply asking details of any point or points of unfairness in our article, and offering, should we be convinced of any unfair or inaccurate statements, to give publicity to the same in our next issue. The fact that we go to press early in the week was intimated, but in spite of the apparent urgency of the matter in the minds of the solicitors, no answer to our letter had reached us late in the afternoon of Monday, July 21st. A telephone message asking when a reply might be expected was answered by them to the effect that they had nothing to say until they heard further from their clients. In view of the forcible terms of the solicitors' letter, it is somewhat surprising that there should be any delay on the part of the Committee in giving particulars of what is described as a "gross outrage." This brief note is inserted in order that our readers may learn that the management have a version of the staff resignations sufficiently convincing to themselves to warrant the intervention of a firm of solicitors.

Yellow Bacteriology.

The daily Press has again been exerting its influence towards the enlightenment of the public. That the poorest man may not live a day longer without scientific knowledge of some sort or another our morning papers have found room between the fat advertisements of lying cure-alls for a bacterio-statistical paragraph lifted from *Le Matin.* We are told impressively that "a cubic centimetre of the water in which a bronze coin of 10 *centimes* was washed would disclose no fewer than 760,000 bacteria, 3 per cent. of which was mouldiness." This alleged sentence is almost worth reprinting for its plucky disregard of literary conventions, but still more as it is a fair example of the stuff that is doled out to us for our improvement. Apart from the fact that we have no idea of how many cubic centimetres of water were used, and that therefore we cannot say what proportion the 760,000 bacteria mentioned bear to the total intrinsic flora of the French penny, it is doubtful whether these rows of zoetropic zeros convey much to us. The figures are so big it is hard to get a grip of them. The whole game is very futile. An educated Frenchman spending his days in laundering our personal equipment or douching out our naso-pharynx, publishing the results, then asking to be taken seriously, is too much of a good thing. We are quite free from the clutches of the green-eyed monster, even if this is one of the things they do better in France.

Deutschland ueber Alles.

Germans are human. We have looked upon them for so long as a race of iron fists with no velvet glove, as indomitable supermen plodding unswervingly towards a place in the sun, as beings who would attain their appointed goal at any cost unmoved by human frailties, and only amenable to the dictates of science, patriotism, and the police regulations. We were wrong every time, and all the time. They are men like unto ourselves, and liable to carelessness even in matters scientific. The Prussian Minister of the Interior has issued a decree. It starts off with some glitterless generalities about the undesirability of issuing potent poisons to the public in bulk and with no directions. After these wise saws come modern instances of how the German club doctor manages his dispensing. He has issued 25 grams of salicylate of sodium, with directions that this be divided into twenty-five doses, and one half of these self-divided quantities be taken occasionally. "As much as will go on the point of a knife" is a frequent direction for the internal administration of drugs, and one man ordered a tablet of corrosive sublimate to be dissolved in "a beer-bottle of vinegar." There is no evidence that these slipshod methods actually resulted in definite harm to anyone, but it is certainly right that they should be discouraged. And it may be a comfort to some of us to see that such careless ways and slackness are not a monopoly of our own country.

The Nursery School.

A problem of no small magnitude is that of the care of young children under the school age among the poorer classes. The homes of many such infants are anything but rearing grounds for healthy children, who would undoubtedly be much better if they were cared for in an institution—if only for a few hours daily. The question was discussed in the Section of Hygiene of Infancy and Child-Study at the recent Congress of the Royal Sanitary Institute at Exeter, in a paper by Dr. F. H. Stirk, School Medical Officer, Exeter. The ordinary day nursery does not always fulfil the functions that might be expected of it, since any trained supervision therein is too often intermittent rather than continuous. The ideal plan would appear to be the extension of the work of the health visitor, infant consultations, etc., up to the end of the second year, when the child could be admitted to the nursery school. Here it would be attended with others up to the age of five, and the school would therefore include the present babies' classes of air infant schools. In poor districts the gain to the community would be enormous, for a good healthy foundation would be laid before the school age commences. The staff should consist of teachers as for infant classes, a woman to tend the children and wash them when necessary, and the school nurse would make daily visits with a view to the early detection of disease. The school medical officer would attend when required by the school nurse. From the financial standpoint, such an enterprise might prove a little more costly than the existing infant schools, but this could be met in part by a capitation grant from the Board on the basis of that for older children. The experiment is one which should commend itself seriously to the notice of all local authorities.

The National Association for the Prevention of Consumption.

Two days before the International Congress of Medicine opens in London, the National Association for the Prevention of Consumption and other Forms of Tuberculosis will hold its Fifth Annual Conference in the Central Hall, Westminster. The opening address will be delivered by the Right Hon. H. H. Asquith, M.P. On August 4th Dr. H. W. G. Mackenzie will introduce the subject of tuberculin treatment in a general survey, and papers on the nature of tuberculin—its preparation, varieties, and underlying pathological principles—will be read by Professor G. Sims Woodhead, of Cambridge, and Professor Lydia Rabinowitsch-Kempner, of Berlin. Professor Beraneck, of Neuchatel, will read a paper on the *rationale* of the use of tuberculin: its possibilities and limitations; and the therapeutic value of tuberculin and the principles of dosage will be dealt with by Professor Sahli, of Berne, and Dr. Nathan Raw, of Liverpool. The range of application of tuberculin will be discussed by Professor Adami, of Montreal, Sir James Kingston Fowler, Sir St. Clair Thomson, Sir R. W. Philip, Dr. Noel D. Bardswell, Dr. Clive Riviere, and others. On August 5th there will be a public discussion on the need for the co-ordination of anti-tuberculosis measures. The opening address will be delivered by Sir R. W. Philip and the following delegates have promised to take part:—Professor Adami (Canada). Dr. Hermann Biggs and Professor W. C. White (United States), Professor Pannwitz (Germany), Dr. Rist (France), Professor Saugmann (Denmark), Professors Tamburini and Signorelli (Italy), and Dr. von Unterberger (Russia). A conversazione will be held on the evening of Monday, August 4th, at which Dr. Rollier (Leysin) will give a cinematograph demonstration on the cure of surgical tuberculosis by direct sunlight. A film ("The Fight against Consumption"), illustrating the working of a complete co-ordinated scheme for dealing with consumption will also be shown. The ensuing week is pre-eminently one of congresses, so that those practitioners who are up in London may find it advantageous to attend as many meetings as possible, especially as we understand that tickets of admission are being sent to all medical practitioners in the Metropolis.

Leprosy in the Light of Modern Research.

Many problems concerning the ætiology of leprosy have been attacked with fresh vigour during the past few years, especially from the bacteriological and prophylactic aspects. Our contemporary, the *South African Medical Record*, entering into the spirit of modern methods, has recently issued a series of three special numbers devoted to leprosy, the writers dealing with the subject primarily from the standpoint of South Africa, but at the same time generally in the light of modern research. Dr. H. Bayon, the Research Bacteriologist in Leprosy to the Government of the Union of South Africa, contributes a most interesting article entitled "A Critical Review of Recent Experimental Leprosy Research" Among the conclusions at which he arrives are the following: That Kedrowsky's culture is true leprosy; that the disease can, in certain circumstances, be transmitted to animals, the most suitable apparently being the rabbit, rat and mouse; and that leprosy is a contagious disease. He regards this last point as established "because it is a disease due to a definite bacterium; because the great majority of cases originate in countries where leprosy is relatively common; where the disease has developed in individuals who had never left a leprosy-free country, the intimate contact with lepers, who, in their turn, had contracted the disease abroad, is proven; and because in the countries where leprosy has been re-introduced in modern times, the infection spreads concentrically from the first imported cases." In an article on "The Administrative Side of the Leprosy Question," Dr. C. F. K. Murray, the Chairman of the Leprosy Commission in 1894, advocates a modification in the present system of segregation, advising the establishment of leper settlements or villages to admit of family life, the granting of enough land to allow those able to work to do so, the establishment of one or more central leper hospitals to which all the more feeble should be sent for treatment, and the impressing upon the sick of the value of the settlement from the standpoint of cure.

PERSONAL.

H.R.H. Princess Louise (Duchess of Argyll) will open the completed building of the Hospital for Epilepsy and Paralysis, Maida Vale, on Friday next.

The Duke and Duchess of Norfolk opened the new premises of the Norfolk and Norwich Hospital last week.

The Duchess of Albany opened the new buildings of the Central London Ophthalmic Hospital last week.

Dr. Albert Lindow, of Plumstead, has been placed on the Commission of the Peace for the County of London.

Mr. John George Fenwick, late of Bournemouth, has bequeathed £50,000, free of duty, to the Newcastle Royal Infirmary.

Dr. William Dyson, M.D.Vict., has been appointed Honorary Special Lecturer in Dermatology in the University of Manchester.

Dr. Robert Bridges, M.A., M.B.Oxon., F.R.C.P., formerly attached to the staffs of St. Bartholomew's and the Great Ormond Street Children's Hospitals, has been appointed Poet Laureate.

Dr. A. J. Clark, M.B.Cantab, M.R.C.P.Lond., has been appointed Lecturer in Pharmacology at Guy's Hospital Medical School.

Mr. Kenelm H. Digby, M.B., B.S., F.R.C.S., has been appointed Professor of Anatomy in the New University of Hong Kong.

Dr. E. N. Cunliffe, M.D.Vict., M.R.C.P.Lond., has been appointed Lecturer in Clinical Medicine in the University of Manchester.

Dr. David Hunter, M.A., M.B.Cantab., has been appointed Medical Superintendent of the Coppice Mental Hospital, Nottingham.

Mr. L. E. Barrington-Ward, Ch.M., F.R.C.S.Edin. and Eng., has been awarded the Chiene Medal in Surgery in the University of Edinburgh.

Dr. T. Buzzard, M.D., F.R.C.P., has been appointed by the Senate of the University of London a Governor of the Westminster Hospital Medical School.

Mr. P. L. Watkin Williams, F.R.C.S.Edin., M.R.C.S., L.R.C.P.Lond., has been appointed Consulting Surgeon to the Bridgewater Workhouse Infirmary.

Dr. James Galloway, M.A., M.D.Aberd., F.R.C.P.Lond., has been appointed Consulting Physician for Skin Diseases to the Metropolitan Asylums Board.

At the last meeting of the Maidstone Town Council Dr. Charles Pye Oliver, M.O.H., was publicly congratulated by the mayor on his recent appointment as an Honorary Physician to H.M. the King.

Dr. G. C. McK. Mathison, M.D.(Melb.), has been awarded the D.Sc. degree in Physiology of the University of London, for a thesis entitled "The Action of Asphyxia upon Nerve Centres," and other papers.

Our readers will sympathise with Dr. J. L. Livingstone, of Hursley, near Winchester, in the sad death of his seventeen-year-old son, who fell from a tower of Bodiham Castle, Sussex, to the ground, and was instantly killed.

Dr. John Gutch, of Ipswich, was the recipient the other day of a handsome presentation at the annual meeting of the East Anglian branch of the British Medical Association, in recognition of his valuable services as secretary for the South Suffolk Division of the Association for many years past.

Dr. James Ritchie, M.A., M.D., B.Sc., F.R.C.P.Edin., Superintendent of the Laboratory of the Royal College of Physicians of Edinburgh, and well known as the joint author of Muir and Ritchie's "Manual of Bacteriology," has been appointed to the new Chair of Bacteriology in the University of Edinburgh, instituted under the bequest of Mr. Robert Irvine, Royston, Granton.

Dr. H. F. Hayes Newington, for twenty years Treasurer of the Medico-Psychological Association of Great Britain and Ireland, and a Past President, was presented with his portrait in oils and an address last week upon the occasion of the 40th anniversary of his connection with the Association. The Committee who signed the document included a number of the Association's past Presidents.

Capt. P. J. Marett, R.A.M.C., who has already published valuable papers upon sand-fly fever, has been selected to undertake a research into the nature of the virus of this disease, in addition to his military duties at Malta. Captain Marett will have the title of Beit Memorial Research Fellow, inasmuch as the research is being assisted by the trustees of the Beit Memorial Fellowships, upon the advice of the advisory board.

CLINICAL LECTURE
ON
REFLEXES AND THEIR SIGNIFICANCE. (*a*)

By FREDERICK S. PALMER, M.D., F.R.C.P.Lond.,

Physician to the West End Hospital for Diseases of the Nervous System.

FROM the clinical standpoint, the study of reflexes is indispensable in all neurological cases. It is of paramount diagnostic and localising importance. By a careful observation of these tests valuable evidence is obtained of the condition of the spinal centres, and of the pathways of conduction above and below them.

As the grey matter in every segment of the spinal cord is known to contain centres for certain muscle groups, and reflex movements, a knowledge of these signs, the various segments to which they belong, together with their anatomical and other relations constitutes the basis of spinal localisation. In the physiological sense of the term a reflex is briefly defined as "the result of peripheral excitation," or, in other words, the involuntary response to a stimulus applied to the surface—mucous, cutaneous, or tendinous. The time usually occupied in the reaction is estimated at about one-tenth of a second. Normal reflex activity depends on the integrity of the reflex-arc, and its proper connections with other centres situated at higher levels. If any one of these structures be irritated or destroyed, irregularities of reflex-action occur. The reflex-arc is constructed of an afferent, or sensory nerve, an intermediate centre (spinal cord or medulla), and an efferent or motor nerve. Excitation of the centripetal nerves reaches the centre by the posterior roots, from whence the motor response is transmitted along the centrifugal route. All lesions of the reflex-arc which diminish the function of conduction either decrease or abolish the reflex movement; but when the spinal centres are abnormally irritated, and when they are incompletely cut off from the controlling influence of the cerebral centres, the reflexes are increased. Total destruction of communication between the centres at different levels, whether it be caused by injury or disease, results in abolition of the deep reflexes below the seat of the lesion. Before discussing the various methods of eliciting reflex-action, it should be borne in mind that in certain instances, the movement may be inhibited by voluntary effort, and in some functional diseases, notably neurasthenia and hysteria, the reflexes are very frequently exaggerated. In order to arrive at an accurate conclusion of the results of these tests, it is essential to obtain complete relaxation of the muscles, and, if possible, to secure the intelligent cooperation of the patient. Several observations are sometimes necessary. Three groups of reflexes are distinguished:—

(1) Superficial—cutaneous or mucous.
(2) Deep—muscular or tendinous.
(3) Organic—or visceral.

SUPERFICIAL.

In this group are included the cranial reflexes, such as contraction of the pupil to light, dilatation of the pupil on irritating the skin of the neck, contraction of the palate on tickling the fauces, sneezing and lachrymation from irritation of the nasal mucosa, etc.

The cutaneous reflexes vary in activity even in normal individuals. Usually they are most marked in children, and they are more easily obtained in women than in men. They consist of more or less rapid muscular contractions in or near the part stimulated, but if the excitation be excessive, the contractions may spread to neighbouring muscle groups, or invade others at a distance. When present, the reflexes demonstrate the integrity of the reflex-arc at the level which is being tested, or through which such impulses are travelling. In organic cerebral hemiplegia the superficial reflexes, with the exception of the abnormal type of plantar reaction, are at first commonly diminished or lost on the affected side, but subsequently they are increased.

The most important normal cutaneous reflexes with the spinal segments to which they belong are:

Scapular.—Contraction of the scapular muscles on stroking the skin between the scapulæ 5th cervical to 1st dorsal.

Epigastric.—Contraction of the upper fibres of the rectus with dimpling of the epigastrium on the side irritated, on stroking the skin downwards from the nipple. 4th to 7th dorsal.

Abdominal (Rosenbach's sign).—Contraction of the abdominal muscles with drawing of the umbilicus to the side stimulated, on stroking the skin in a downward direction from the costal arch, or on scratching the skin over the outer edge of the rectus. 9th and 10th dorsal.

Absence of the reflex is very often an early and fairly reliable sign in disseminated sclerosis. It is also frequently lost in some actute abdominal diseases, and said to be exaggerated in pachymeningitis and early tabes.

Cremasteric.—Ascension of the testicle on stroking the skin over the inner side of the thigh, or by making pressure over the sartorious muscle. 1st and 2nd lumbar.

The reflex is sometimes diminished, or may be absent in elderly men, and exaggerated on the affected side in some cases of sciatica.

Bulbo-cavernous.—Contraction or twitching of the bulbous urethra, felt by a finger placed behind the scrotum, on pinching or pricking the dorsum of the glans penis. 3rd or 4th sacral. Loss of the reflex is common in tabes.

Gluteal.—Contraction of the gluteal muscles on stroking the skin of the buttock. 4th and 5th lumbar.

Anal.—Contraction of the sphincter ani on pricking the perianal cutaneous surface. 5th sacral and coccygeal.

Plantar.—Flexion of the toes, most marked in the four outer ones, on slight stimulation of the sole of the foot. The movement is accompanied

---

(*a*) Clinical lecture delivered at the West End Hospital on May 28th, 1913.

with, or preceded by, contraction of the tensor fasciæ femoris, and if at all pronounced, by drawing up of the leg and thigh. 5th lumbar to 2nd sacral.

Careful observation of the test is of the utmost importance. The stimulation should be gentle, just sufficient to provoke a slight response and no more. In children under three years of age, or who are unable to walk, the normal reaction is extension of the toes.

The most convenient method of eliciting the reflex is to place the limb to be tested at rest, rotated on its outer side, flexed at the hip and knee, then gently scratch the outer side of the sole with a pencil, and watch the first movement of the toes, particularly the hallux.

Abnormal Cutaneous Reflexes.

Plantar (Babinski's phenomenon).—Extension of the great toe on gentle stimulation of the sole of the foot with or without a fan-shaped extension of the other toes (*phénomène d'éventail*). The response is less rapid in appearance than the normal movement of flexion.

Oppenheim's Reflex.—Extension of the hallux obtained by making firm pressure along the inner edge of the tibia from above downwards.

Paradoxical Flexor Reflex (Gordon's sign).—Extension of the great toe brought about by squeezing, or making firm pressure on the deep calf muscles.

Malleolar Reflex (Chaddock's sign).—Extensor movement of the hallux on scratching the skin over the outer malleolus from the heel inwards.

Persistent extension of the great toe obtained by any of these methods is a manifestation of some defect in the pyramidal system, rarely, if ever, seen in health. Gordon claims for the paradoxical flexor response that " it is also present in slight lesions, or irritation of the motor tract, and motor centres," and may be elicited in some cases long before the Babinski plan gives a definite result. I have made a great many observations of the test during the last four years, and my experience is that I have been much more successful in eliciting the response by gentle irritation of the outer side of the sole than by any other method. The same may be said of Oppenheim's and Chaddock's signs.

Normal Deep Reflexes.

Although these reactions are commonly called tendon reflexes, the description is not strictly correct, since they may be provoked by concussion of the periosteum and muscle, as well as by the tendon. Like the normal superficial reflexes, they may be increased, decreased, or abolished. As a rule, they are increased in spastic paralysis and decreased in atrophic cases. There appears to be considerable doubt whether they can be regarded as true examples of spinal reflexes, or merely indications of the myotatic irritability of muscular tonus. For clinical purposes it is sufficient to say, their presence implies that the reflex-arc at the level under investigation is intact.

The most important of the deep reflexes and their segmental levels are :—

Arm-jerk.—(*a*) Contraction of the biceps, when the arm is semi-flexed, on tapping the tendon at the bend of the elbow. 5th and 6th cervical, flexion movement.

(*b*) Contraction of the triceps, when the arm is semi-flexed and the hand supported by the observer, on striking the tendon or muscle at the back of the elbow. 7th cervical, 1st dorsal, extension movement.

Wrist-jerk.—Contraction of the supinator longus, when the elbow is flexed, and the patient's hand supported, on tapping the forearm about the styloid process of the radius. 6th to 8th cervical. Flexion movement.

The reflex is often increased in neurasthenia and disseminated sclerosis, and sometimes diminished in tabes.

Knee-jerk (Westphal's sign).—Contraction of the quadriceps extensor, particularly of the vastus internus, with forward movement of the foot and leg, when the flexors of the knee are relaxed, on sharply striking the ligamentum patellæ. 3rd and 4th lumbar.

The ordinary plan of eliciting the reflex is to ask the patient to cross one knee over the other, and this is in most cases sufficient ; but in stout people, who often experience difficulty in placing one lower limb across that of the opposite side, and also in some nervous persons, who are unable to relax their hamstring muscles by this method, recourse must be had to other measures, these are :

A.—The observer passes one arm beneath the hamstring muscles of the leg to be tested, and grasps the opposite knee with his hand, so that the knee rests upon his arm, and the foot is slightly raised from the floor when the patella tendon is struck.

B.—Place the patient on a firm elevated seat with its edge in contact with the hollow of his knee, and his feet not touching the ground, when the slight blow is delivered.

C.—In the recumbent position with his legs extended, the observer draws the patella slightly downwards, places one of his fingers across its upper border, and strikes the finger with a percussion hammer.

D.—Make the patient lie on a couch with the limb to be examined rotated on its outer side, and flexed at the hip and knee when the tendon is tapped.

Reinforcement.

If none of these plans succeed in eliciting a response, the method called reinforcement must be tried. The object in view is to obtain more complete relaxation of the knee flexors by diverting the patient's thoughts from the test, and fixing his attention elsewhere. The measure is useful in increasing the energy of a feeble jerk, but it has no appreciable influence over a reflex which is absent from pathological causes. There are two methods of reinforcement.

Jendrassik's.—The patient seated in a chair with his eyes fixed on the ceiling and his terminal phalanges interlocked on their palmar surfaces, is told to pull strongly with both arms when the tendon is struck.

Laufenauer's.—When the patient is seated with both feet resting on the floor, a little in advance of his knees, he is directed to squeeze the observer's arm when he grasps the quadriceps extensor with one hand, and strikes the tendon with the other.

The knee-jerks on account of their significance and accessibility are probably more frequently tested than any other of the deep reflexes. Not for one moment would I question the value of the evidence thus obtained. Their absence is always highly suspicious of some involvement of the nervous system, central or peripheral, but I feel bound to say that I dissent from the assertion made in nearly every text-book on medicine and by nearly every author who has written on diseases of the nervous system, that loss of the knee-jerks is always pathological. For some years I have devoted a good deal of attention to the subject, and in the out-patients' department of this hospital I have in a few cases failed to elicit the reflex when I have been unable to discover any other definite symptoms of organic nervous disease. I do not attach so much importance to that, because in dealing with numbers in a limited time, it is probable that I did not exhaust all the methods of elicitation, or in a necessarily hurried examination I may have overlooked other objective symptoms; but let me quote two cases from my private notes, about which I feel tolerably sure.

The first is a lady, 56 years of age, unmarried, who has been coming to see me at long intervals for the last 3½ years. Her complaints, chiefly gastric, are I believe entirely functional. At her first visit I tested her knee-jerks and failed to obtain any response. On each subsequent occasion I have repeated the experiment in a different way with precisely the same results. She is quite as concerned as I am about the absence of her knee-jerks, so I cannot imagine she tries to inhibit the reaction. Her pupils are equal, respond briskly to light and accommodation, and her gait is perfectly normal. She is spare and active, and there is no trace of rombergism. From what I know of her character and antecedents, I consider it most unlikely that she ever had specific disease, or has been addicted to alcohol. If she has any organic trouble I am unable to discover it, and the development is very slow, for I think she is in better general health now than when I first made her acquaintance.

The second is that of a medical friend, who called to see me a few evenings ago, and has given me permission to make use of the note. In the course of conversation he told me he had no knee-jerks, and had known that fact for many years. At his suggestion, I tested the statement by every method I could think of at the time; but, like all my predecessors who had examined him, with a negative result. He is a man of good professional standing, whom I have known, and sat next to at committee meetings for the last eight years. I am glad to add that so far as I know, he appears to enjoy excellent health in spite of his absent knee-jerks, and he volunteered the remark that he never had syphilis. From these two examples, and others I can recall, I am convinced that some modification of the statement contained in books is desirable, if not actually necessary. Absence of the reflex is, however, so rarely met with in healthy people that when it occurs either bilaterally or still more significant on one side only, it would make me keenly on the look-out for other signs of organic disease, or developments in the same direction.

The knee-jerks are, or may be, lost in many morbid nervous conditions including tabes, taboparesis Friedreich's ataxia, neuritis, complete transverse myelitis, acute anterior polio-myelitis, progressive muscular atrophy, amyotrophic lateral sclerosis, Landry's paralysis, syringomyelia, the later stages of subacute combined sclerosis, some intracranial tumours with pressure, deep coma, pneumonia, and temporarily in family periodic paralysis and after attacks of epilepsy.

Increase of the reflex occurs in organic diseases of the pyramidal tract without complete break of continuity, in lateral and insular sclerosis, dorsal and cervical myelitis, the early stages of subacute combined sclerosis, tetanus, strychnia poisoning, and in some functional disorders.

Ankle-jerk.—Contraction of the calf muscles when the leg and ankle are flexed, on tapping the Achilles tendon, first and second sacral, extension movement. The most convenient plan of testing the reaction is to make the patient kneel on a chair with his feet beyond its edge.

The reflex is often abolished before the knee-jerk in tabes, and on the affected side in many cases of sciatica.

ABNORMAL DEEP REFLEXES.

Ankle-clonus.—Sustained uniform to and fro movements of the ankle (alternate flexion and extension) at the rate of from 6 to 9 a second, when the knee is flexed, and the observer abruptly flexes the foot, supporting the knee with his other hand.

A spurious form of ankle-clonus is not infrequently seen in functional disease (hysteria) but it is never sustained, nor is it associated with an extensor plantar reflex. It consists of a few vibratory movements when the test is first applied, and passes off quickly.

Jaw-jerk (Mandibular reflex).—Contraction of the masseter and temporal muscles, sometimes accompanied by closure of the eyelids, on tapping a finger placed horizontally across the chin, or on striking a paper knife laid on the lower incisors, when the mouth is partially open.

The reflex is said to be usually absent in health, but from numerous tests made in the wards and out-patients' room, I have noticed a movement strongly resembling a jaw-jerk in some cases of neurasthenia and hysteria.

Contra-lateral movement.—Extension of the leg with adduction of the opposite limb on striking the patella tendon when the patient is in the recumbent position and his knees are semi-flexed.

Paradoxical contraction.—Tonic persistent contraction of the anterior tibial muscles when the foot is gently flexed upon the leg and the muscles are suddenly approximated.

The reflex is rarely obtained and is usually associated with a spastic condition of the lower limbs.

The abnormal deep reflexes with the exception of the jaw-jerk, of the value of which, as a sign of organic disease, I am by no means satisfied, may be looked upon as manifestations of an involvement of the nervous system.

ORGANIC REFLEXES.

The chief organic reflexes of clinical interest are those of the bladder, rectum and pupil. In health, evacuation of the contents of the viscera is performed by contraction of their own muscular fibres (probably in some cases assisted by the efforts of the diaphragm and abdominal muscles), and relaxation of the sphincters which guard their orifices. Normally the sphincters are maintained in a state of tonic contraction, relaxed only during the acts of micturition and defæcation. Both these functions are to a great extent under the influence of the will. The signal for action is given by the sensory nerves, conducted to the brain, and the impulse proceeds along the motor pathway. The centres concerned in micturition and defæcation are three in number—cerebral, spinal, and sympathetic. The highest are located in the cortex, corpus striatum and optic thalamus, the spinal are contained in the second sacral segment, and those for the lowest levels are situated in the hæmorrhoidal and hypogastric plexuses. Any pathological condition of the centres or their connecting links produces disorders of reflex-action, incontinence or retention of urine, diarrhœa, or constipation. Examination of the sphincters in such cases gives us important information concerning the seat of the lesion.

Sphincters.—The state of the sphincter vesicæ is ascertained by passing a sound along the urethra, and noting the degree of resistance encountered.

The sphincter ani is tested by digital examination, and inspection of the anus.

When the sphincters are permanently relaxed from destruction of their centres, as, for instance, in myelitis of the lower end of the spinal cord, there is a continuous escape of urine and fæces; but if the break occurs above the centres and it is complete, there would be at first retention followed by intermittent incontinence, and there may be constipation—the voluntary cerebral influence is suspended. When the bladder is full, the sphincters are relaxed reflexly without the patient having any power to hold back his urine, and it may even be discharged without his knowledge.

If the sphincters remain intact, the bladder may become enormously distended, relief taking place from what is called overflow incontinence. Over-distension of the bladder leads in time to paralysis of the detrusor, the viscus is never emptied, residual urine collects, decomposes, sets up cystitis, and the other evils which follow in the upper urinary organs.

True dribbling of urine (incontinenza veri) is frequently noticed in tabes, from anæsthesia of the bladder, or possibly, from degenerative changes in the sensory part of the reflex-arc.

In tabes, and also in disseminated sclerosis, the urinary disorder may take the form of hesitating or precipitate micturition. Expulsion of the contents of the rectum is most probably influenced by a similar mechanism, incontinentia alvi occurs when the sphincters are paralysed, but the discharge of fæces depends to a considerable extent upon the consistency of the stools, and the efforts of the abdominal muscles.

In the absence of other morbid conditions not of nervous origin, incontinence of the sphincters nearly always means organic central disease, but there is no doubt that it may occur in hysterical affections. About five years ago I saw at a nursing home in one of the suburbs, a young lady, 23 years of age, who was suffering from paresis of the lower limbs with incontinence of urine. She was very emotional—alternately sobbing and laughing. All her cranial nerves and reflexes, with the exception of the pharyngeal, which did not respond, were perfectly normal. She could flex and extend her legs freely in bed, but said she could not raise her heels. She was well nourished, and although she had been in bed some little time, I could not detect any signs of muscular atrophy. Percussion over the pubes convinced me there was no distension of the bladder. After some coaxing I persuaded her to try to get up. The nurse placed her feet on the floor, but when she attempted the erect position, her knees immediately gave way (astasia abasia) and she fell, not on the ground, but very skilfully across the bed. A few applications of the wire brush down the spine arrested the incontinence; in a fortnght I heard she was walking about the room and shortly afterwards left the home apparently cured.

Pupil-Reflex.

The pupillary reflexes are those of light and accommodation.

Light.—If the patient be placed opposite a good light and both his eyes are completely covered by the observer's hands, under normal conditions, when one hand is suddenly withdrawn, the iris is seen to contract at once and decidedly. Wernicki's pupil, or as it is more frequently called the hemiopic pupillary reaction, is a test employed in some cases of hemianopia. A ray of light is thrown on to the blind side of the visual field.

Absence of the reflex indicates a lesion in the optic pathway behind the chiasma between it, and including the quadrigeminal bodies.

Accommodation.—This is easily tested by asking the patient to look first at a distant object, and then at something quite near to him; the eyes must necessarily accommodate to enable him to see it. The centres for the pupil-reflex are the third cranial nerve, the ciliary ganglion and the second dorsal.

Abolition of the light reflex occurs in paralysis of the third nerve, disease of the ciliary ganglion and in advanced optic atrophy. The reflex may be modified or not obtained under certain toxic conditions, such as belladonna or opium. Absence of the ordinary light reflex with preservation of accommodation, the Argyll-Robertson pupil is one of the earliest and most valuable tests of tabes, and general paralysis. It has been noted in nearly eighty per cent. of the cases. It may be unilateral or bilateral, but the presence of a sluggish or normal light reaction does not exclude these diseases, nor does an active knee-jerk.

The opposite of the Argyll-Robertson pupil, loss of convergence with preservation of the light-reflex, is seen in diphtheritic neuritis; paralysis of the palate with regurgitation of liquids, nasal intonation, and the other symptoms of diphtheria would, however, make the diagnosis clear.

Summary.

If we ask ourselves the question what help does the study of reflexes give us in the diagnosis of nervous diseases apart from the important evidence they supply in localisation, I think it may be said:

1.—That the Argyll-Robertson pupil, Wernicki's sign, true sustained ankle-clonus, a persistent extensor type of plantar reflex, the contra-lateral movement, and paradoxical contraction are valuable objective signs of organic nervous disease.

2.—Loss of all reflexes in any particular area points to pathological causes.

3.—Abolition of the knee or ankle-jerks and sphincteric incontinence is strongly presumptive of central or peripheral nervous disease.

4.—Increase in the normal jerks without other objective symptoms is suggestive of neurasthenia.

5.—Absence of the palate and plantar reflexes is in favour of hysteria.

References.

"Diseases of the Nervous System." Gowers and Taylor.
"Diseases of the Nervous System." Oppenheim.
"Nervous Diseases and Psychiatry." Dana.
"Nervous and Mental Diseases." Church and Peterson.
"The Diagnosis of Nervous Diseases." Purves Stewart.
"Diseases of the Nervous System." Gordon.
"Diseases of the Nervous System." Judson S. Bury.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Professor J. Veit, M.D. Subject: "Puerperal Eclampsia and its Treatment."*

ORIGINAL PAPERS.

THE MEDICAL TREATMENT OF PHLEBITIS.

By H. VAQUEZ, M.D.

Professor at the Faculty of Medicine of Paris, Physician to the Paris Hospitals.

[SPECIALLY REPORTED FOR THIS JOURNAL]

Speaking generally, phlebitis that has been diagnosed is phlebitis that can be cured, provided, of course, that we are dealing with docile patients who grasp the importance of every detail of the treatment During the acute stage the patient must be kept perfectly quiet and motionless, with the head low on a rather hard mattress. He should be absolutely forbidden to sit up or make any attempt to flex the thighs on the trunk, since this movement kinks the veins and may detach an embolus

If the phlebitis be limited to the leg, the latter may be placed in a gutter splint, but should the inflammation extend higher than this, a splint is inapplicable, because it would bruise the sacral and gluteal regions In this case it will suffice to wrap the limb in cotton and fix it by means of broad linen bands which are attached to the mattress with safety pins and are passed round the leg, knee and thigh. It is well to fix also a broad band over the chest to prevent involuntary movements while asleep.

Whenever possible it is preferable to employ a mechanical bed, which greatly facilitates the nurse's duties, indeed it is practically indispensable in cases of double phlebitis, especially as it lessens the irksomeness of immobility.

In any case we must take care that the heel is well supported, not too much raised yet raised enough, in order to avoid the bruising of the heel that would otherwise ensue. The foot should not be in extension but at a right angle and fixed in that position with bandages. The patient's comfort depends on these little attentions.

Medicinally we are justified in relieving the pain by morphine injections at bedtime.

Of local applications some are permissible, while others should on no account be employed. The common practice of applying compresses steeped in a solution of sal ammoniac is simply detestable, because with the idea of setting up counter-irritation we run the risk of causing disastrous effects. The strong solution runs down the leg and collects at the most dependent parts of the limb, macerating the skin and paving the way to sloughing, which may take months to heal. What may be usefully applied is belladonna pigment or belladonna and opium ointment.

After five or six days of the painful stage we must proceed to employ resolutive measures. For three or four hours daily the limb is wrapped in thick hot moist dressings which have the same effect as a poultice, these compresses to be steeped in normal saline solution. The temperature is to be taken night and morning and duly recorded on the chart.

Period of Passive Movement.—This stage may be said to begin as soon as the three following signs are present, viz.:—(1) Complete absence of a rise of temperature for at least twenty days. After this period of apyrexia the clot is in all probability solidly anchored. Experience teaches us that in seven or eight days the original clots are solid enough to adhere, and the only cause for anxiety is the elongated clot which does not contract adhesions or undergo absorption as soon.

(2) Absolute indolence of the veins on palpation both superficial (saphena) and deep (back of calves, popliteal hollow, internal aspect of the thigh and inguinal fold).

(3) Retrogression of the œdema as shown by marked diminution of the rotundity of the limb and a characteristic flabbiness. In cases of double phlebitis the examination must comprise both limbs.

These favourable symptoms are manifested towards the 25th or 30th day from the onset of the phlebitis, when in the interval there has been no rise of temperature. This is a departure from the classical delays formerly imposed which were too protracted and kept patients immobile for unnecessary periods, much to their detriment. On the contrary we must have recourse to passive movement as soon as possible in order to avert numerous complications.

At this stage we must follow a methodical course in the employment of the exercises. To begin with, we shall seek to restore suppleness to the joints, commencing with the joints of the foot and toes. This gains time and gives patience until the time comes to move the large joints, which would be dangerous before we are certain of having secured adequate rest for the limb. At the same time the skin of the limbs may be lightly, very lightly, rubbed. After two or three days the rubbing may be extended to the whole limb, taking care to avoid undue pressure on the vasculo-nervous bundles. After five or six days of passive movement we may proceed to flex on the knee, if necessary, by breaking down any adhesions.

The next thing to engage our attention will be the stiffness of the muscles, which is often very pronounced. The wasting of the calf and thigh is well marked, and this atrophy explains the awkward gait of the patients. It is better to postpone the stage of getting up until we have in some measure restored strength to the muscles and suppleness to the joints. This is the next stage of the massage which is gradually made to act on the deeper structures and is followed by passive movements of the articulations.

At last the time comes for the patient to leave his bed. It is quite unnecessary to make him use crutches if the directions given in the preceding paragraph have been followed. He need only steady himself by grasping the furniture as he goes along, and ere long all he will require is a stick. In this way, by the end of the second month, the patient should have recovered the complete use of his limbs and be able to walk, without any trace of stiffness.

When once he is up and about it is unnecessary, and even undesirable, for him to wear an elastic stocking. Should the circulatory troubles persist, with œdema and cyanosis increased by standing, this is no reason to advise an elastic stocking, which hinders not only the normal venous circulation, but also the collateral circulation that has been set up. At most a crêpe bandage may be allowed.

Treatment of Subacute Venous Septicæmia.—This is a special variety of phlebitis, often limited to the superficial veins and displaying a tendency to recur or shift from one spot to another. Just when we are tempted to look upon the patient as convalescent from his attack of phlebitis and to allow him to get up, inflammation supervenes along the track of the same saphenous vein or the one on the opposite side. Each fresh attack is accompanied by a rise of temperature lasting two or three days. I can recall the case of a man who is now having his tenth recurrence of phlebitis. In these cases complete recovery may be indefinitely postponed, and becomes a veritable "Will-o'-the-wisp."

The treatment of these cases is not carried out on exactly the same lines. The patient must be immobilised for seven or eight days, which is sufficient to obviate the risk of embolism in superficial phlebitis. Effleurage (light rubbing), which is so much recommended in these cases, has not, on the other hand, given me satisfactory results, though done with the greatest gentleness; indeed, it has seemed to set up fresh attacks of inflammation. These patients should therefore be left at rest, and after the period of immobility the joints should be passively moved, but no friction applied over the veins.

Treatment of the Sequelæ.—The shorter the period of immobility the less marked will be the œdema. After an appropriate course of treatment all that remains should be a little non-painful stiffness, which a little rubbing and massage will cause to disappear.

On the establishment of the collateral circulation it is not uncommon for varicosity of the veins to develop, and it is difficult not to credit this with an inflammatory origin, though as a rule it is considered to be of purely mechanical origin. Its occurrence is ushered in by a feeling of weight in the legs on standing but not in walking, and here elastic stockings may advantageously be recommended.

Pain, too, is a common sequela of phlebitis. This may be due to irritable vessels or distension and congestion of the veins with neuropathic reactions In these cases electrotherapy and hydropathy are indicated.

Sometimes we get neuritic manifestations more especially affecting the sciatic nerve. In this case electrotherapy is preferable to hydrotherapy.

The Surgical Treatment of Phlebitis—Surgical intervention may be called for in several different conditions :—

(1) In the acute stage of ordinary phlebitis and in most cases of relapsing subacute inflammation there can be no question of surgical measures. When, however, the recurrent inflammation becomes fixed in a particular area, ablation of the packet of varicose veins will effect a cure.

(2) In presence of persistent pain accompanying varicose dilatation excision is also indicated, possibly on a large scale.

(3) Lastly, in presence of a varicose ulcer, resection of the ulcer if not too extensive, or of the veins at a distance, is indicated. In cases of persistent pain accompanying tiny venous dilatations with atrophic changes in the skin threatening ulceration, such as is often met with in the internal malleolar region, here agan surgical intervention will often effect a cure.

APEX-TREATMENT
FOR
PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.Cantab., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

I.

THE PULMONARY FACTOR.

In human tuberculosis there are two chief aspects for study, the bacillus, and the lung as its main breeding ground and supply. The fact that tuberculosis is largely a lung question obtained practical recognition more than a third of a century before the discovery of the bacillus, in the foundation of the Brompton Hospital, followed by other special hospitals and later by our sanatoria. Little headway was made with pulmonary treatment because its other factor was unknown. Another third of a century has nearly elapsed since Baumgarten and Koch's discoveries led to the foundation of the tuberculosis laboratory, and of the laboratory treatment of the bacillus. Remarkable strides have been made in the study of that treatment, but comparatively little headway with the cure. Is this perhaps because the lung factor has received during that period hardly any of that attention which has been lavished with such admirable thoroughness upon the infective factor? That question might, with some fitness at this date, have been considered at our Annual Conference for 1913. As that was not possible, owing to the programme having been already completed, it is now presented in these pages.

The "specific" treatment by tuberculin has been aimed also at the other localisations of tubercle, but at none of them on so large a scale. In most of them some alternative treatment is available and is preferred. We do not treat a tubercular joint or a tubercular peritonitis by tuberculin; we hand them over to the surgeon for short work. Incidentally it is significant that in tubercular arthritis the latest appeal from the quick cure by the knife has not been addressed to tuberculin but to heliotherapy, which has justified itself as a cure independently of it. That fact bears upon the special question as to the efficacy of tuberculin, which is not under discussion here, though, strange to say, it has again been raised for discussion elsewhere at the end of these thirty-three years. The special point before us is why the pulmonary affection is almost alone in being, practically speaking, restricted to the "general" tuberculosis cure, whether by tuberculin or open-air sanatorium, or by both combined. The reason for this is not that it is in any sense less "local" than the others. In a tubercular peritoneum or joint we can hardly guess where the original lesion may have had its site. In the lung we know that it has its site at the apex; we can listen for it there, and now we can even see it. Pulmonary tuberculosis is eminently a local affection, and essentially an "apex question": *no apex-tuberculosis, no phthisis.* The difficulty is that for reasons peculiar to the lung the local trouble is not readily accessible to the knife; and moreover that it is still assumed to be inaccessible to any other form of localised treatment, excepting, perhaps, the intra-pulmonary injections which have recently been advocated. But this remains only an assumption until conclusive evidence shall have been obtained from a further study of the pulmonary factor. It is not suggested that that study has been entirely neglected. Freund took it in hand in 1858 in connection with prevention; and modern surgery has taken it in hand with remarkable results for the rescue of the hopelessly advanced stage. But if we turn to the special hospitals and sanatoria for treatment, and to the preventoria for prophylaxis, do we find that any attempt has been made to localise the treatment to the site of the disease? The purpose of this inquiry is contained in the three questions: "*Is there* any local apex-treatment?" *Should there* be a local apex-treatment?" "*Can there* be any local apex-treatment?" These will be further considered in subsequent issues.

THE
LEUCOCYTE COUNT IN GAS AND ETHYL CHLORIDE ANÆSTHESIA.

By WILLIAM GUY, F.R.C.S.,
Dean, Edinburgh Dental Hospital,
ALEXANDER GOODALL, M.D., F.R.C.P.,
Lecturer in Physiology,
AND
H. S. REID, M.D., F.R.C.S.,
Carnegie Demonstrator of Physiology, School of Medicine of the Royal Colleges, Edinburgh.

In a previous paper (*a*) we postulated that an anæsthetic which caused little demonstrable disturbance of function was, *cœteris paribus*, to be preferred to one which had more effect on the body apart from the anæsthesia. We have already demonstrated the effect of several of the short-time anæsthetics on the circulation (*b*). As the result of these observations we were able to show the great advantage of the use of gas and ethyl chloride in sequence over the use of ethyl chloride alone. We have now made a series of observations on the leucocyte count immediately before and immediately after the use of this sequence. So far as we are aware, no account of the effect of the short time anæsthetics on the leucocyte count has ever been published. The subjects of observation were all patients at the Edinburgh Dental Hospital. After the mouth had been examined a sample of blood was taken from the lobule of the ear and diluted in the Thoma-Zeiss leucocytometer pipette, with 1 per cent. acetic acid tinged with methyl green. The anæsthetic was then administered. An inhaler containing one gallon of nitrous oxide was applied and rebreathing was allowed. After five respirations a measured quantity of ethyl chloride (from 1 to 3 cc.) was introduced and this mixture was re-breathed for 25 seconds. The operation was then carried out and immediately thereafter a second pipette (which had previously been carefully compared with the first one) was charged. The number of leucocytes in 400 of the small squares of the counting chamber was then ascertained and the number per cmm. thus determined.

In order to exclude the possibility of fallacy from differences in the concentration of the blood we made frequent observations of the hæmoglobin content at the same time as the leucocyte count but never found any difference between the amount present before and after the anæsthetic.

Some of the patients were suffering from suppurative conditions and showed a leucocytosis. It is well known that persons showing a leucocytosis due to one cause may not react in the usual way to a second stimulus to leucocyte increase, and therefore we have placed in a special category all those cases in which the initial count exceeded 10,000 per cmm.

We also excluded cases where there were signs of obvious illness. Otherwise the cases in Table I. are consecutive.

Table I.

	Sex.	Age.	Leucocyte Count before Anæsthesia.	Leucocyte Count after Anæsthesia.
1.	M	18	9,600	11,200
2.	M	26	5,600	6,800
3.	F	18	5,400	6,400
4.	F	18	6,800	7,200
5.	F	18	7,000	7,200
6.	M	35	5,800	5,400
7.	M	21	8,600	7,600
8.	F	30	7,200	8,400
9.	F	22	6,800	5,600
10.	M	23	8,200	13,000
11.	F	13	7,200	10,000
12.	F	30	6,400	4,000
13.	M	25	6,200	5,600
14.	M	19	9,600	6,800
15.	F	18	9,200	9,800
16.	F	17	8,000	8,800
17.	F	21	6,800	10,000
18.	M	30	7,000	11,000
19.	M	8	8,600	10,000
20.	M	18	7,600	9,600
21.	F	17	8,000	10,000
22.	F	10	7,400	7,200
23.	F	24	8,800	8,000
24.	F	14	4,400	4,000
25.	F	17	6,000	7,600
26.	F	34	7,000	5,000
27.	F	19	9,000	13,000
28.	F	16	9,200	7,200
29.	F	16	9,400	9,800
30.	F	18	8,000	8,800
31.	M	20	7,200	9,400
32.	F	29	8,200	9,200
33.	M	18	6,800	8,000
34.	F	21	7,400	7,000
35.	F	37	7,200	10,000
36.	F	36	5,200	8,000
37.	M	20	5,400	6,400
38.	M	17	8,600	5,000
39.	F	36	7,200	8,600
40.	M	20	9,000	9,000
41.	M	19	5,000	6,800
42.	F	19	5,400	6,600
43.	M	18	7,800	7,000
44.	F	12	7,200	6,200
45.	M	29	8,000	8,200
46.	M	19	8,200	8,200
47.	F	25	6,600	4,800
48.	M	18	7,200	7,000
49.	F	21	7,600	10,000
50.	F	16	8,800	10,200
51.	M	19	8,800	11,000
52.	M	33	7,400	6,000
53.	F	19	8,800	7,400
54.	M	16	8,600	8,800
55.	F	40	8,000	7,400
56.	F	45	4,600	8,000
57.	F	21	7,800	6,000
58.	F	32	9,600	7,000
59.	F	20	6,600	7,000

(*a*) *Edin. Med. Journ.*, 1910.
(*b*) *Ibid.* 1911.

	Sex.	Age.	Leucocyte Count before Anæsthesia.	Leucocyte Count after Anæsthesia.
60.	F	18	8,600	11,800
61.	M	21	7,800	9,800
62.	M	22	8,800	7,200
63.	F	32	4,000	4,800
64.	F	17	9,400	7,000
65.	M	25	7,000	7,200
66.	F	38	6,800	9,000
67.	F	26	5,600	7,800
68.	M	19	6,400	10,800
69.	F	22	9,800	6,000
70.	M	14	8,800	10,800
71.	F	63	6,400	7,000
72.	M	30	5,000	7,200
73.	F	22	7,200	5,400
74.	M	12	5,600	9,000
75.	F	21	5,600	5,200
76.	M	17	7,200	6,600
77.	F	21	6,200	7,600
78.	F	23	6,000	8,600
79.	M	9	6,400	9,600
80.	F	65	8,600	8,800
81.	M	17	5,000	9,200
82.	F	16	5,600	5,200
83.	M	20	5,600	5,200
84.	M	36	5,000	6,400
85.	F	24	8,200	6,400
86.	M	15	9,200	12,200
87.	M	6	6,400	4,000
88.	F	29	9,000	7,600
89.	F	16	8,800	8,000
90.	M	20	6,000	7,200

Table II.—Cases with Pre-Existing Leucocytosis.

	Sex.	Age.	Leucocyte Count before Anæsthesia.	Leucocytes after Anæsthesia.
1.	M	27	11,600	13,200
2.	M	32	13,200	8,200
3.	F	18	11,800	10,000
4.	M	20	17,400	16,000
5.	M	50	17,000	14,000
6.	F	3	10,600	9,400
7.	F	9	12,600	15,200
8.	M	20	10,800	11,000
9.	F	11	12,000	10,000
10.	F	12	10,200	8,200
11.	M	19	10,400	7,600
12.	F	21	10,000	8,200
13.	M	8	11,000	10,800
14.	F	10	11,200	11,800
15.	F	28	11,000	10,400
16.	F	26	12,000	8,800
17.	M	19	12,600	10,000
18.	M	18	12,800	15,000
19.	M	27	10,200	10,000
20.	F	22	12,800	10,000
21.	F	15	10,000	8,000
22.	F	16	10,800	6,000
23.	M	27	14,000	11,000
24.	F	26	13,000	9,000
25.	M	14	10,600	6,000
26.	F	19	10,800	9,000
27.	M	19	11,000	8,000

It is probable that the error in the leucocyte count may reach but does not exceed 20 per cent.

We find that of the 90 cases in Table I., 47 show no difference greater than 20 per cent. between the pre-anæsthetic and the post-anæsthetic count. Of the remaining cases, 30, or 33.3 per cent. show an increase in the leucocyte count; 13 or 14.4 per cent. show a decrease of more than 20 per cent.

A point of passing interest is that the average count (before anæsthesia) in 90 practically healthy persons was 7,277 per cmm.

Of the 27 cases in Table II., with a pre-existing leucocytosis, 13 show no change exceeding 20 per cent., 1 shows an increase exceeding 20 per cent., and 13 show a decrease exceeding 20 per cent.

It may be concluded (1) that the administration of gas and ethyl chloride in sequence as described causes little disturbance of the leucocyte count, such disturbance as does occur being usually in the direction of a slight increase, and (2) this comparatively negative finding is a factor additional to those which we have already demonstrated in favour of the advantage of this procedure in the induction of short time anæsthesia.

THE TREATMENT OF INFANTILE PARALYSIS.

By PAUL B. ROTH, F.R.C.S., &c.,
Surgeon to the Kensington and Fulham General Hospital, Senior Clinical Assistant in the Orthopædic Department, London Hospital.

This paper is concerned with the treatment of the results of anterior poliomyelitis. It may be summed up in two words—Prevent Deformity. This is done by :—

1. Maintaining at all times the natural temperature of the affected part.
2. Relaxing the affected muscles, so as to prevent them from becoming stretched, and their opponents from becoming contracted.
3. Exercising the affected muscles so soon as they show any return of voluntary power.
4. Employing suitable mechanical means.

1.—Maintain at All Times the Natural Temperature of the Affected Part.

It is still an everyday occurrence to meet cases of I.P. which have been treated for years by instruments, massage, and electricity, without any attempt having been made to keep the limb warm. When the instrument and stocking are removed, we find a bluish wasted leg, disfigured with the scars of broken chilblains, and inches shorter than the other one. Yet if the limb be kept warm, there will be little wasting, no discoloration or chilblains, and no shortening. The way to keep it warm is not by massaging it, but by putting on sufficient clothing. The best plan is to add layer after layer of stocking until the limb becomes as warm as the other. When the child is fitted for an instrument or boot, the measurements must be made over this extra clothing. Unfortunately the instrument-maker of the present day usually makes his measurements upon the naked limb, and the efforts of the parents to keep the limb warm by extra stockings only result, when the instrument or boot is applied, in cramping of the toes, pressure sores, and callosities. The parents soon realise this and omit the extra clothing.

In addition to the stockings, after the boot is put on, a gaiter lined with cat or rabbit skin should be worn, with the fur turned towards the limb. Girls wear these gaiters until they grow up: as soon as boys are old enough they can be put into trousers and the trouser leg of the affected side lined with the fur.

At night it may be necessary to wear a stocking, but not nearly so much clothing is required then as is the case in the daytime, for in bed it is the rule for the paralysed limb to get warm without extra clothing of any kind. This is due to the warmth afforded it by the healthy limb, to the little loss of heat undergone when cosily tucked up in bed, and also to the horizontal position of the limb. This leads to an important point in treatment, never to let the affected limb hang down. Whenever the child is resting the affected limb must be supported: if a leg, on a chair; if an arm, then in a sling.

Be the vaso-motor system of the limb ever so seriously affected, it can still carry on its work if sufficient help is given it by minimising the heat loss and reducing the peripheral pressure. And if it carry on its work every one of the tissues will receive its normal amount of blood, and so many of the classical signs of I.P. will never even make their appearance.

To what extent the sequelæ of an attack of I. P. are due to the vaso-motor disturbance I am not prepared to say, but that they are largely due to it there can be no question. Even the muscular paresis is largely influenced by it, for one has frequently noted good movement in a limb when made warm before the fire, in which, when cold, there appeared to be no voluntary movement at all.

Every morning and evening the circulation may be still further assisted by ten minutes in a warm bath (100° F.).

It is customary in these cases to order massage, because it is able to restore the circulation in the part for the time being; but if, as in the simple manner above described, the part be kept warm and the circulation good always, the need for massage vanishes, and it can then only be considered a luxury, not a necessity.

2. RELAX THE AFFECTED MUSCLES, SO AS TO PREVENT THEM FROM BECOMING STRETCHED, AND THEIR OPPONENTS FROM BECOMING CONTRACTED.

Nothing is more disheartening to the orthopædist than the examination of case after case of I.P. of the lower extremity in which the foot has been allowed to become dropped, though actually under medical treatment all the time. With the dropping of the foot the tendo Achillis becomes contracted, and often secondarily to this, the hamstrings follow suit. A cutting operation is now usually necessary to repair the negligence of the medical attendant. If a case be treated efficiently from the start, a tenotomy will never be required.

The harm caused by allowing the foot to become dropped is only in part the obvious disability of a shortened tendo Achillis, which can be put right by a tenotomy; much more to be deplored is the stretching and elongation of the paralysed extensor muscles. For when recovery begins in the nerve, and impulses are sent along it to dorsiflex the foot, though these impulses would cause healthy muscles to do so, they are quite unable to produce a sufficient contraction in the stretched muscles. If the muscles are already relaxed, they are in the best condition for contraction, but if stretched they are in the most unfavourable condition for it. Dr. Abercrombie, of Sheffield, to whose recent paper (1) I shall again refer, gives the following explanation of this: "When a muscle-fibre is overstretched, its sheath (sarcolemma) is brought into a state of tension, causing lateral compression of its contents. By this lateral compression the longitudinal channels which compose the dark bands will be compressed one against the other, and this will have the effect of obstructing the orifices of the minute pores through which the translucent material gains entrance to the channels. This affords a simple mechanical explanation of the ill-effects of overstretching; for since the ingress of the translucent material into the channels of the dark band is impeded, so also will physiological contraction of the muscle be hindered or prevented, even though the nervous mechanism of the muscle be intact."

The treatment to be adopted, therefore, is in some manner to relax the affected muscles, that is, in this particular case, to prevent foot-drop. This is done by applying a right-angled splint to the foot and leg, either a tin "night-shoe" or a Thomas club foot splint (*a*), and making the child wear it day and night, until recovery in the muscles is well advanced. In all probability it will need to be worn at night for years. It is not sufficient to tell off a parent or even a masseur to move the foot every day, to prevent it from becoming dropped; slowly but surely the foot will become fixed in a dropped position if it be not placed in the splint.

It is to be hoped that this principle, namely, the relaxation of paralysed muscles during the period of repair in the nerve supplying them will soon be generally recognised, and employed in all nerve lesions where recovery is hoped for. Mr. Sherren (2) has advocated it in injuries to the peripheral nerves, but so far as I know its general use has never been suggested in I.P., certainly never in I.P. of the erector spinæ or of the quadriceps extensor.

3. EXERCISE THE AFFECTED MUSCLES SO SOON AS THEY SHOW ANY RETURN OF VOLUNTARY POWER.

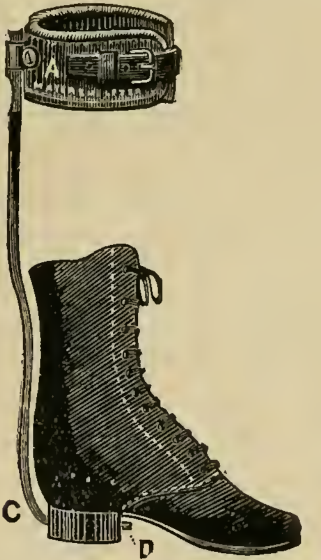
The method of exercising the muscles and of discovering whether they possess voluntary power has been clearly described in Dr. Abercrombie's paper, "The Treatment of Muscular Paresis by Means of Eccentric Movements," from which I have already quoted. In that paper he emphasises the importance of eccentric as opposed to concentric movements. "By a concentric movement is meant the ordinary movement of a muscle which does work while becoming shorter; on the other hand a muscle is said to perform an eccentric movement when it does work while becoming longer." He, however, merely touches upon a point which I specially wish to emphasise, namely, the importance of the stimulus of the patient's will. This was recognised many years ago: thus—"as soon as possible rouse the action of the paralysed muscles by the most important functional stimulus of the will, which cannot be replaced by any other." (3) In carrying out the eccentric exercises the patient's will is specially brought into play, and it is perhaps largely owing to this that they prove so successful.

Apart from set exercises every effort is made to get the patient to move and use the affected limb. If it be the leg that is paralysed, he is encouraged to walk and run and skip; if the arm, then the good arm is bound to the side for a fixed time every day and the affected only allowed to be used.

(*a*) The latter is quite efficient, and much the cheaper of the two.

4. Employ Suitable Mechanical Means.

If the condition be so severe that he cannot walk, or that he can only walk with great difficulty, or with obvious tendency to the production of deformity, a walking instrument must be provided, but not otherwise. For when an instrument is worn, although it favours muscular recovery to a certain extent, *e.g.*, in a very bad case which could not walk at all without it, yet after a certain point has been reached it hinders recovery by doing the work of the muscle for it. It should therefore be applied sparingly and not retained too long. The application of a walking-instrument and T strap in order to correct a simple paralytic varus or valgus has always appeared to me to be peculiarly unnecessary; it can be so much better corrected by thickening the sole and heel of the boot on the outer or inner side, as the case may be. This wedged sole can be applied, moreover, to the patient's ordinary boot at the cost of a couple of shillings; whereas the walking-instrument and T strap cost perhaps 30s., and necessitate a surgical boot. When there is paralysis of the extensor group of muscles only, causing foot-drop, it is not necessary to apply a walking-instrument double to the knee, with uplifting toe-spring attached; a much simpler and lighter appliance is a posterior uplifting toe-spring, supplied by Mayer and Meltzer. This was first described by my father, Bernard Roth. (4) It consists of a flattened posterior steel (see Fig.), which is moulded to the contour of the leg; its upper end is riveted to a metal band passing round the calf; its lower end turns suddenly forward at right angles and fits into a slot in the back of the boot-heel. This is not visible from the front, and only slightly noticeable from the side.



Cliché of Inf. Par. Splint.

I cannot enter further here into an account of the mechanical treatment of I.P. I hope to deal with it adequately in a subsequent paper.

Remarks.—The stock treatment for a case of I.P. is "Massage and Electricity." Almost any doctor will tell you so. This idea has also got firmly implanted in the mind of the public; it should be our endeavour to uproot it. As regards massage, I am unable to see that it does anything more than improve the circulation of the part for the time being, and for just so long as the massage lasts; for half-an-hour perhaps out of the twenty-four; whereas sufficiently warm clothing will keep the circulation at its best for the whole of the twenty-four. As regards electricity in these cases, has anyone ever shown that it is really of value? It was introduced by Duchenne (5) in 1855, who firmly believed that it would cure I.P.; he even thought it could produce a new muscle. Since then it has gradually caught on, and now in every electrical department, twice a week, we find the paralysed limbs of little children stuffed into baths along with a couple of electrodes.(*a*) A prayer by a Christian Scientist would possibly be more useful. Even when the case is treated with care, and each paralysed muscle stimulated separately with a button electrode, is it not doubtful whether good is done?

Though I cannot hope this single paper will shake the universal faith in "massage and electricity," I do trust it will do something to spread the knowledge of a better treatment which may roughly be summed up in two sentences—*keep the limb warm, and apply a night-shoe.*

References.

(1) Dr. Abercrombie. *B.M.J.*, Feb. 8th, 1913, p. 273.
(2) Mr. Sherren. "Injuries of Nerves and Their Treatment." 1908, p. 72.
(3) Dr. M. Roth. "Paralysis in Infancy, etc." 1869, p. 61.
(4) Mr. Bernard Roth. "Medical Annual." 1890, p. 380.
(5) Dr. Duchenne. "D'Electrisation Localisee et de son Application a la Therapeutique." Paris, 1855.

April, 1913.

CLINICAL RECORDS.

NOTES ON CASES ILLUSTRATING THE RELATION OF CERTAIN AFFECTIONS OF THE SKIN TO CARDIO-VASCULAR DISEASE.

By DAVID WALSH, M.D.Edin.,
Senior Physician, Western Skin Hospital, London.

The following cases illustrate the association that in the author's opinion commonly exists between many affections of the skin and cardio-vascular disease. It is fairly obvious that any serious defect in the heart or arteries must correspondingly disturb the balance of the peripheral circulation. That being so, it necessarily follows that the normal processes of nutrition, secretion, repair, defence, and so on, must be modified by the abnormal cutaneous blood supply. The author's view is that one of the early signs of many forms of valvular disease is the diminution or loss of the speedy recovery from non-destructive traumatism which characterises the healthy skin. The sun which simply tans a sound skin is apt to set up a severe dermatitis in the case of a patient suffering from heart disease or from arteriosclerosis. The author has notes of a number of cases of sun dermatitis and summer eruption, in all of which some serious organic or functional cardio-vascular defect has been found. Some of the skin eruptions symptomatic of cardio-vascular defects are of an acute nature, but the greater number are naturally of a chronic or recurrent nature, extending in some instances over many years. Any dermatologist who wishes to put the matter to the test will find an unlimited number of cases among his patients. The skin is subject to incessant attacks of micro-organisms of many kinds, which are kept at bay, as it were, by the circulation of a copious supply of blood adequate in quality and in quantity. When the cutaneous circulation is damaged through disease of the heart or blood vessels, the natural defences of the blood (opsonins, phagocytosis, etc.) are correspondingly decreased, and the organisms from without are able to secure a footing in the deeper tissues, where they give rise to

---

(*a*) The apparent good produced by this treatment is due to the hot water.

secondary vascular changes, such as plugging of vessels, perivascular inflammation, arterio-capillary fibrosis, and so on.

R. G., m., 41, housekeeper, came to hospital complaining of a rash affecting limbs and trunk; the scalp, face and neck also affected. Had been under a private doctor for six months; said at one time he "peeled from head to foot." When first seen he had a fine papular rash, running into sheets in places, moist and diffuse in groins. The general health had always been good, except that he suffered at times from rheumatic pains in joints. He now had pain in right shoulder. His mother suffered from rheumatism, and died at 78. The digestion was good, a little shortness of breath, no palpitation. Pulse 100, arteries somewhat thick for age. Cardiac dulness one inch to left of nipple line, impulse to lower border of fifth rib. A systolic mitral murmur was heard, conducted into axilla. The seborrhœic dermatitis almost disappeared under treatment, but recurred more than once, and he was under treatment again 16 months after his first visit. The patient had at no time shown symptoms calling attention to the heart. The view taken of the case was that the cardiac defect had rendered the skin vulnerable to invasion by the seborrhœic organisms, and at the same time less amenable to local treatment. To the disturbance of the blood supply was also attributed the chronic and recurrent nature of the malady.

N. T., female, æt. 32, s. teacher, came with several small patches of alopecia areata of 12 months' duration; she had a previous attack at 7 years of age. Her father died of a fit in early life. Mother living, in good health. General health good, slight muscular rheumatism at times. She had a slight operation a year ago—the removal of a small growth from breast. She suffers from a little indigestion and shortness of breath at times, but has no palpitation. The pulse is 80, compressible; arteries good. The cardiac dulness is one inch outside nipple line, and on lying down after exertion a mitral systolic murmur is heard, conducted into axilla. The murmur could not be heard when patient was standing up. (In all these cases a stethonoscope was used for auscultation.)

This case illustrates the association of alopecia areata with valvular disease. In the author's experience it is the rule rather than the exception. The only condition that led to the examination of the heart and the detection of a latent murmur was the alopecia areata. The causation of the bald patch is probably the same as in the skin eruption—the weakened surface circulation acts as a predisposing condition, and permits the exciting traumatism—in the shape probably of seborrhœic organisms—to gain a footing and more or less effectually block the local blood supply. The shedding of the hair is an accident due to the sudden plugging of the small capillaries of the hair bulbs.

S. W., f., 51, married, complaining of rosacea of face of four years' duration; suffered from rheumatic pains in joints at time, but otherwise has had good health. She has of late years complained of indigestion, shortness of breath and palpitation. A mitral systolic murmur was heard, conducted into axilla; cardiac dulness 1 inch outside nipple line. A rough systolic murmur also heard over tricuspid area. The rash was papulo-erythematous.

T. P., f., 28, s. teacher, complaining of loss of hair for several years past. The hair was thin, especially along vertex and at crown; formerly very thick. The scalp was thin and light; much dandruff. The pulse was 120, compressible. She had suffered from dyspepsia, but did not complain of shortness of breath or palpitation; ankles sometimes swollen at night. The face flushes readily. The cardiac dulness was found 1 inch outside left nipple line. There was a mitral systolic murmur audible at angle of scapula.

The foregoing is one of many cases of premature baldness associated with valvular disease of the heart. As a rule the condition does not respond favourably to treatment.

C. F. W., m., 16 years, school, for two years had suffered from a severe papular and pustular eruption of face. The papules were not obviously connected with the follicles; were dull red; and pus, when present, was scanty. The heart was found to be dilated—dulness 1½ inch to left of nipple line. The patient went in for football, running, and other violent exercises, and had fainted a few weeks previously. He had been in the habit of using strong carbolic soap for the face. The case was diagnosed as acneitis, due to the irritant action of the soap in a cardiac subject. With rest and heart tonics the heart condition rapidly improved, but the skin eruption persisted months after the heart murmur had disappeared and the heart had returned to a normal size. A von Pirquet test was applied, with positive results. Treatment was then commenced with .0003 injection of tuberculin (T.R. mixed), increased gradually. The face condition gradually improved, and is now practically well.

Various other chronic tuberculides and paratuberculides have been noted in patients suffering from cardio-vascular disease. Several cases of lupus and of ulerythema have also been met with, but their number has not yet been large enough to permit of any sound deductions. The association of skin rashes with cardio-vascular affections opens up an exceedingly wide and important field of investigation. It seems not unlikely that disturbance of capillary circulation may afford a key to many affections of internal organs—that is to say, like the skin, they are unable to establish a healthy reaction against traumatism.

OPERATING THEATRES.

HAMPSTEAD HOSPITAL.

Abdominal Cases Operated on by Mr. Jackson Clarke.

Case 1.—Acute Obstruction (Adhesions).—Boy, æt. 10. History of pain in his side, chiefly at night, for some weeks. Four days ago acute abdominal pain and vomiting. Large dose of castor oil gave little result. Since then pain has been nearly constant and vomiting frequent. Absolute constipation. Abdomen tender all over, more marked over epigastrium. No movement. Tympanitic note over whole of abdomen. Lies with knees drawn up. Peritonitic facies. Temperature, 99.8°; pulse, 74. *Operation.*—$CHCl_3$—ether. Abdomen opened. Intestine found gangrenous, strangulated by adhesions formed after operation for appendicitis 3½ years ago, and a second operation for ventral hernia three months later. Three feet of intestine excised. One dainage tube. Tube out on 23rd day. Post-operative bronchitis. *Result.*—Cured.

Case 2.—Extra-uterine Gestation.—Woman, æt. 31. Patient has never lost a period. Two months' history of a constant vaginal flow, almost disappearing with rest, and increased by exertion. Pain for the same length of time in the right side of the abdomen. Seven days ago sudden severe pain in "stomach," accompanied by profuse perspiration and the loss of about half a pint of blood. Two days ago something came away with a few sharp dragging pains. Temperature, 100.2°; pulse, 88. *On examination:* Abdomen flaccid and moves well. In no pain or respiratory distress. Uterus palpable of the size of a 3½ months' pregnancy. To the right of the uterus pain and tenderness and a second mass not quite so large as the uterus. Complains of pain on micturition. *Vaginal examination.*—Uterus enlarged; cervix hard and os closed. Marked tenderness in right fornix, and a distinct tumour is palpable bimanually. *Operation.*—C.E.—ether. Abdomen opened and a large cystic tumour found on the right side, bound down by numerous adhesions. Adhesions broken down, and tumour brought out through the wound, which ruptured in the act, revealing a two months fœtus. Oophorectomy performed on the right side. Wound healed by first intention.

CASE 3.—Carcinoma of Ascending Colon and Cæcum.—Man, æt. 63. Abdominal pain and vomiting once a week for six weeks. Extreme constipation. No hæmatemesis or melæna. Losing weight. No gastric previous history. Abdomen soft, not distended, and gives tympanitic note all over. No visible peristalsis. Large semi-mobile tumour to right of umbilicus about the size of a cocoanut. Tender on deep palpation. Liver enlarged; descends half-way to umbilicus. Bronchitis. Some enlarged glands felt per rectum. No enlarged inguinal glands. Inguinal scrotal hernia. *Operation.*—Median incision. A large carcinomatous tumour presented about the size of an apple, and involving the ascending colon and part of cæcum. Too adherent for excision. Meso-sigmoid very short. Ileo-sigmoidostomy performed. Lateral drainage tube. Tube out on fifth day. Uneventful recovery.

CASE 4.—Suppurative Cholecystitis; Appendicitis.—Man, æt. 56. Eight days' history of continuous pain in right iliac fossa. Bowels not open four days. No vomiting. On admission marked resistance and tenderness and some fulness over seat of pain; maximum tenderness over McBurney's point. Bowels open day of admission. Urine normal. Temperature 99.2°; pulse, 100. *Operation.*—On admission. Battle's incision. Appendix inflamed, but not gangrenous. Cæcum injected. Appendicectomy. One tube. Tube out on seventh day. Wound healing well. Fourteen days after operation much pain, suggestive of renal colic. Two days later markedly jaundiced. *Second operation.*—Fortnight later. $CHCl_3$—ether. Incision over gall-bladder, which was found to be inflamed, shrunken and perforated. Some purulent matter escaped. Cholecystectomy. One tube. Subsequently suffered from diarrhœa and incontinence of fæces, which improved a good deal before discharge. Tube out on 15th day. On discharge both wounds healed. Some swelling of legs.

CASE 5.—Perforated Duodenal Ulcer.—Woman, æt. 31. Twelve hours' history of acute pain and sudden onset, between shoulders and whole of right side of abdomen. Vomited four times after pain began. Bowels open twice. No jaundice. Past history of dyspepsia. Looked ill on admission. Abdomen rigid. Temperature, 98°; pulse, 80. *Operation.*—On admission. $CHCl_3$—C.E.—ether. Median subumbilical incision. Pelvis contained quantity of turbid, inoffensive blood-stained fluid. Nothing abnormal found in pelvis. Supra-umbilical incision. Turbid fluid again found. Nothing abnormal in lesser sac. Old healed scar of gastric ulcer. Fluid escaping from second part of duodenum; ? post-peritoneal perforation. Posterior gastro-jejunostomy performed; no clamps. Two tubes, one for upper wound through a third incision made in posterior abdominal wall below last rib, and second tube down to pouch of Douglas. Uneventful recovery. One of the tubes (pelvic) out on fourth day. Date of removal of upper tube not noted.

CASE 6.—Enlarged Prostate.—Man, æt. 63. Eleven years' history of increasing frequency of micturition. Only able to pass a small quantity at a time, and cannot hold it. Frequency at night, five or six. No pain on micturition. Pain in back frequently. *Operation.*—C.E.—ether. Supra-pubic prostatectomy. Five separate adenomata of firm consistence were enucleated from the prostate, which was otherwise normal. Tube out on eighth day. Passed urine per urethram on 12th day. Complete control on discharge.

Remarks by Mr. Jackson Clarke will appear later.

TRANSACTIONS OF SOCIETIES.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

MEETING HELD THURSDAY, JULY 10TH, 1913.

DR. DAVID WALSH, the President, in the Chair.

DR. ALFRED EDDOWES brought (1) a patient who he considered exhibited a tendency to rodent ulcer. The patient, æt. 39, had a good family history. At the age of 15 she suffered much from constipation, which she neglected for years. She had a high colour always. About ten years ago she noticed the formation of a large number of white spots on her face (milia). Eight years ago she underwent an operation in Dublin for a small sore on the left cheek "which used to run a little, and when it first appeared used to bleed frequently after washing." Soon after the operation a white spot formed on the sides of the scar and very slowly increased until she consulted Dr. Eddowes last September. It was then clearly a rodent ulcer, nearly an inch in diameter. As Dr. Eddowes had not any available beds at the time the case was passed on to a surgeon at a general hospital, and he removed the growth freely with the knife. The disease, however, again recurred at the lower edge of the scar. It was freely destroyed with a Paquelin cautery by Dr. Eddowes ten days ago. During the operation a small rodent ulcer which had been previously detected on the side of the nose was also burned out. It is in the very red (chronically hyperæmic) skins that hypertrophy of epithelium naturally occurs. Milium is one manifestation, warts another, as also most probably is rodent ulcer. Suspecting this, Dr. Eddowes has treated the skin of this patient's face, and with satisfactory result: the milia are disappearing and the redness of the skin is less marked. Some red, chronically hyperæmic skins do not appear to owe their high colour to excess of, or chemical changes in the secretion, as in the case of acute seborrhœa, but rather to glandular inadequacy of skin—to coin a word for the moment—a *sub*-sebaceous state. Incidentally, he said he had operated upon many rodent ulcers—primary and recurring—and had never had a recurrence after his operations. He only undertook those of reasonable size. Extensive cases he always passed on to surgeons, who occasionally had been too conservative. He personally never operated on such cases without full permission from the patient to take away or destroy as much skin and other tissue as he thought fit. Those present would see that he acted up to his conviction in the present instance.

(2) A case of acute seborrhœa, with band alopecia and pustular acne. The patient, J.B., æt. 26, says she has had a tendency to lose hair and to have pimples or boils on her forehead for six months. She now has acute seborrhœa of scalp, face, ears, chest and back. Upon the forehead there is a band of almost total alopecia, an inch wide; over this area, and on forehead, back and chest are points of suppurating acne. From many of the follicles are protruding comedones and sebaceous plugs. The condition on the forehead seems to occupy a position between alopecia areata and folliculitis decalvans. All the affected areas are redder than normal.

DR. H. SAMUEL showed (1) a man, æt. 45, with lupus verrucosus of the right buttock, of six years' duration. The disease had spread to the inner side of the left gluteal fold, but under X-ray treatment the margins of the original patch were clearing and flattening in a satisfactory manner. The patient also showed some rosacea.

The PRESIDENT recalled a similar case shown by him before the old Dermatological Society of Great Britain and Ireland in 1906 (vide *Brit. Journ. Derm.*, vol. xviii., p. 117), in which a dose of old tuberculin was given, producing a most severe reaction.

DR. EDDOWES referred to a similar case under his own care, in which lupus existed in other parts. He injected mercury with some benefit.

(2) A woman, æt. 34, with lupus erythematosus of the nose and scalp. The patch on the nose had been scraped, having been originally diagnosed as lupus vulgaris.

(3) A young woman with lupus vulgaris of the face, who had received many different kinds of treatment, including Finsen light, ionisation, and salicylic and creosote plaster. Some recent patches had been treated with carbonic acid snow in acetone.

Dr. J. D. P. McLatchie showed a young man with syphilis. The patient had contracted a chancre 2½ years ago, followed by the usual secondary symptoms, and he had received only two months' treatment. Eighteen months ago a lump appeared in the position of the original chancre, and during the last six months he developed some red, scaly lesions on the forearms.

The President thought that tertiary lesions on the penis were not uncommon, and they might be mistaken for a re-infection. He drew attention to the frequency of symmetrical lesions, perhaps parasyphilitic, about the backs of the forearms in tertiary syphilis.

Dr. Tom Robinson considered that cases of "relapsing chancre" (Hutchinson) were fairly common, and that they resulted from insufficient treatment.

Dr. Samuel said that the spirochætes might get locked up in the primary lesion with the formation of a fibrous nodule. This should be got rid of as quickly as possible.

Dr. Robinson showed a case of

PSORIASIS IN A CHILD OF 5½.

The disease first showed itself two years ago, and the eruption had persisted up to the present time. There was no family history of psoriasis.

Dr. P. S. Abraham remarked that cases of psoriasis were distinctly rare under the age of three years. He had seen about twenty under this age.

Dr. John Peterson (introduced) referred to the localisation of the disease in infancy, and said that he had never seen lesions of psoriasis upon the backs of the elbows or the fronts of the knees in very young patients. He believed that the scalp was primarily affected in nearly all the cases, and that if this condition were vigorously treated with an ointment of 15 gr. of salicylic acid to the ounce of pure lard the condition would improve. When the eruption had spread to the body and limbs he was accustomed to treat it with resorcin ointment and pure liquid tar. A salicylic acid and sulphur soap should be used in the bath at least three times a week after all the spots had disappeared.

Dr. D. Vinrace showed a little girl, æt. 11, previously exhibited before the Society, with persistent sores upon the face after varicella. She had been tested by the Von Pirquet test with a negative result. Altogether 28 spots, leaving scars, had occurred on the face and body. Most of the lesions had been treated with the acid nitrate of mercury, but lately the solid carbon dioxide had been used.

The general opinion of the meeting was that the condition was one of multiple lupus.

The President showed a young man from Dr. Robinson's clinic at the Western Skin Hospital with alopecia areata of two years' duration associated with valvular disease of the heart. He also read notes of an investigation recently pursued by himself into 36 consecutive cases of alopecia areata, in only four of which no serious sign of cardio-vascular disease could be found, while 24 were found to have valvular disease.

Dr. Vinrace showed (2) a man, æt. 23, with pityriasis versicolor limited to the left shoulder, of several week's duration.

Dr. McLatchie suggested that the explanation of the unusual localisation of the disease was that the patient wore the same vest continuously, day and night, and slept upon his left side.

Dr. Samuel referred to the low degree of contagiosity in cases of this affection.

Dr. Eddowes considered that the usual text-book treatment of two or three days was seldom, if ever, sufficient.

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

Meeting held July 16th, 1913,

Dr. Frederick Spicer presiding.

Dr. Percy Jakins exhibited the following cases:—(1) A man, æt. 24, with a plum-coloured growth on the left vocal cord; (2) a girl, æt. 22, with a small sessile growth upon the left vocal cord; (3) a woman, æt. 35, with perforation of the nasal septum and extensive specific ulceration of the tonsils and fauces, healing rapidly under treatment by "606."

The Chairman said with regard to case 1 (vascular laryngeal growth) that before making a definite diagnosis of its nature he would like to remove a portion and examine it microscopically.

Dr. McCulloch mentioned a case of papilloma of the larynx, which was ultimately considered to be malignant, but which disappeared under treatment by ultra X-rays (see *British Medical Journal*, October 17th, 1908. There has been no recurrence of the growth.

Mr. Charles Heath and Dr. Walker Wood concurred in the opinion that the diagnosis should be cleared up in the way the Chairman suggested, but that if the growth were obviously innocent, it should be removed by the indirect method. Discussing case 3 (specific ulceration), Mr. Charles Heath said from its appearance he had no doubt that the faucial ulceration was rapidly healing under treatment. The nasal septum, however, was showing less evidence of repair, and this was doubtless due to the non-vascular structure of the cartilage.

Dr. McCulloch (introduced by the Chairman) exhibited four case of extreme deafness (labyrinthine) showing improvement by treatment with the ultra X-rays, tuning fork and other tests being given.

The Chairman expressed himself as deeply interested at the results so far obtained in such hopeless cases; he would be glad to know more about this treatment.

Dr. Walker Wood said that in reference to the cases shown by Dr. McCulloch, he had personally examined and tested them before treatment and again three months later after treatment. There was an undoubted improvement, and although it was but slight, it was encouraging. He hoped on a subsequent occasion that Dr. McCulloch would contribute a paper to the Society explaining his views of the nature and action of these ultra X-rays.

Mr. Charles Heath was also much interested in the cases which had been exhibited by Dr. McCulloch, and said that if the improvement in the hearing was not great, it was unmistakable. This was a class of deafness which had not hitherto been relieved by any form of treatment, and if the X-rays utilised in this manner were likely to be effective, the sooner the fact was known the better. He gathered that Dr. McCulloch had been giving attention to this form of treatment since 1908, and had read some of his publications on the subject in 1909 and 1910. Possibly, at another meeting of the Society Dr. McCulloch might be willing to read a paper upon this treatment, when it could be more fully discussed, and when there might be more cases available upon which to form an opinion of its merits.

Mr. Charles Heath showed:—(1) A case of aural suppuration of 40 years' duration in one ear and 38 in the other, with an interval of two years between the operations. There had been complete recovery with excellent hearing on each side after conservative mastoid operations by the method devised by the exhibitor of the case. (2) A case of chronic aural suppuration of two years' duration with cholesteatoma in both ears (specimen shown) with perfect restoration of structure and function in each ear after conservative mastoid operation by the exhibitor's method.

The Chairman congratulated Mr. Heath upon case 1, and said the ears of this patient were the most satisfactory results of mastoid operations he had ever seen. With regard to case 2, the result of operation showed how much advance there has recently been in the treatment of chronic aural suppuration; not long ago, a patient such as this would have undergone the radical operation, and would have been made deaf by it.

Dr. Pullin drew attention to the cosmetic effects of these two cases of double mastoid operations, and congratulated Mr. Heath upon the results.

Mr. Heath, in reply, said with regard to the case of 40 years' duration, she was referred to him by Dr. Meggison, who did not anticipate that hearing could be restored, but in the hope that arrest of aural suppuration by mastoid operation might put an end to the severe headaches which had marred the whole life of the patient, whereas the result was that hearing had been restored to 20-50ths and 14-50ths, which was really excellent hearing; the headaches, too, had abated. With regard to the double cholesteatoma case, prior to the introduction of the conservative mastoid operation in 1906, Mr. Heath, too, would, under such conditions—as the Chairman had stated—have performed radical operations, and this patient would now be more or less deaf, whereas at present her hearing was more acute than the average girl of her age.

A set of new instruments used in conjunction with the naso-pharyngoscope for the direct treatment of the Eustachian tubes, was shown by Dr. Walker Wood,

Mr. Charles Heath also exhibited several new instruments.

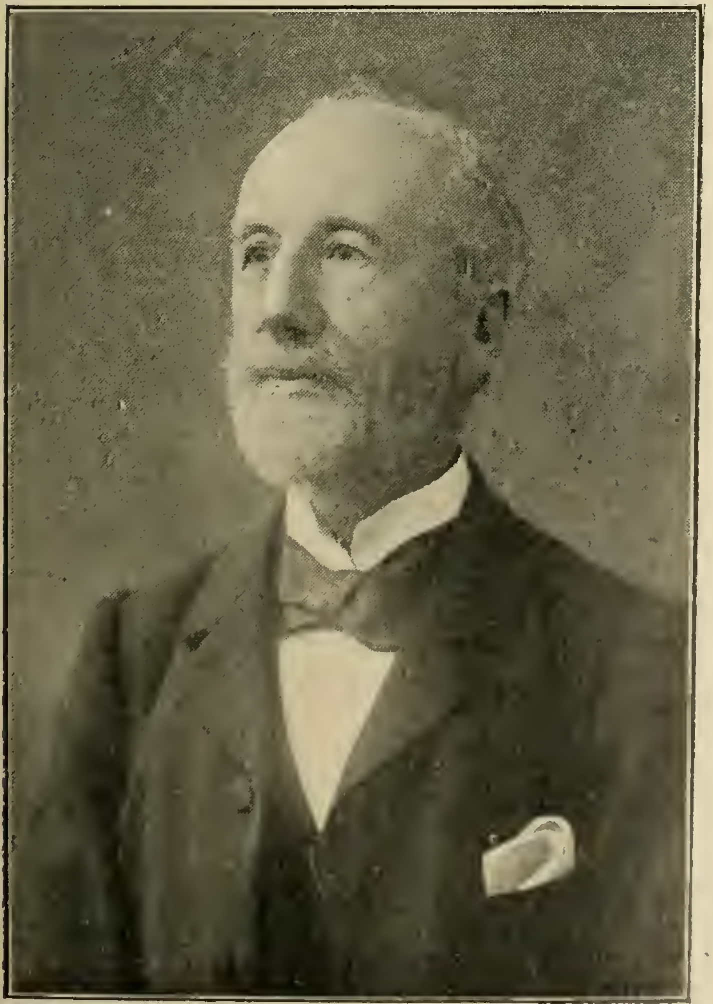
A paper by Dr. James Harper (Glasgow) on "A New After-Treatment of Intra-Nasal Operations" was then read.

SPECIAL REPORTS.

THE EIGHTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT BRIGHTON, 1913.

[By Our Special Representative.]

It is just twenty-seven years since the British Medical Association met at the "Queen of Watering Places," and once again, true to its traditions, the municipality of this famous South-coast resort has extended a magnificent welcome to the many hundreds of members now attending the annual meeting. The town is crowded with visitors, and no pains have been spared by the local members of the profession or by the civic authorities, both of Brighton and the sister corporation of Hove, to render the 1913 meeting a pleasurable one.



Dr. William Ainslie Hollis.

The New President.

Dr. William Ainslie Hollis, Consulting Physician to the Royal Sussex County Hospital, the newly-elected President of the Association, is a man who richly deserves the honour bestowed upon him, for he has always striven to promote the best interests of the medical profession. Born in 1839 at Lewisham, he was educated at Brighton College and Trinity College, Cambridge, where he took his M.A. in 1866. He entered St. Bartholomew's Hospital, qualifying as M.B.Cantab. in 1867, and becoming M.D. in 1871. He held the appointments of Medical Registrar and Casualty Physician at St. Bartholomew's Hospital, subsequently becoming attached to the medical staff of the Chelsea, Brompton and Belgrave Dispensary.

In 1876 Dr. Hollis, having been elected F.R.C.P.Lond., left the Metropolis for Brighton, in which town he has identified himself prominently with the work of the British Medical Association. He was Chairman of the Brighton branch and was afterwards elected to the Branch Council and representative of the South-Eastern Branch. He was also Treasurer of the local defence fund, and at the present time is Consulting Physician to the Royal Sussex County Hospital, in which institution he has always taken the keenest interest.

Dr. Hollis has held the office of President of the Brighton and Sussex Medico-Chirurgical Society and the Natural History Society.

The Association may well congratulate itself in having chosen such a distinguished physician as its leader in this critical time in its history.

General Arrangements.

The conservatism of the medical profession is once more illustrated by the fact that at the annual representative meeting at the Town Hall, Hove, on Monday last, the motion to form a trade union was defeated by more than two to one, after the case for and against had been fully debated.

The President delivered his address last night in the Dome before a crowded and distinguished audience, taking for his subject "The Medical History of Brighton." The Mayor of Brighton, Alderman Thomas Stanford, opened the proceedings by welcoming the Association to Brighton. A replica of the presidential badge of office was presented by the local Division to Dr. Hollis as a token of the esteem in which he is held by his colleagues in the town.

The address in medicine is to be delivered to-day in the Music Rooms of the Pavilion by Professor George R. Murray, Physician to the Royal Infirmary, Manchester, and that in Surgery is to be delivered to-morrow by Sir Berkeley Moynihan, Surgeon to the Leeds General Infirmary.

The annual temperance breakfast has become quite an established function of the annual meeting. It is held under the auspices of the National Temperance League, and will take place on Thursday morning, July 24th, at 8.15 a.m., at the Royal Pavilion. The President, Dr. Hollis, will preside, and Mrs. Mary Scharlieb, M.D., M.S.Lond., will deliver the address. The proceedings will terminate at 9.30.

Religious Services.

A service will be held this afternoon at 3 p.m., at St. Peter's Church, which will be conducted by Canon Hoskyns, the Vicar. It is expected that the Bishop of Truro will preach the sermon. The members attending the service will robe in the Pavilion and will then march to the church, headed by the Corporations of Brighton and Hove.

This morning, at 9 am., a Roman Catholic service will be held at the Church of St. John the Baptist, Bristol Road, conducted by Canon Mgr. Johnston. D.D.

The Work of the Sections.

The scientific work of the Association will be conducted in sixteen sections, all of which will meet in the conveniently situated quarters of the Municipal Technical College and the Municipal Training School, kindly placed at the disposal of the Association by the Brighton Education Committee. These fine buildings are adjacent to each other, and they afford ample accommodation not only for the whole of the sections, but also for the Pathological Museum. Many interesting discussions are to take place, among which may be mentioned that in the Section of Medicine on "Fibrositis and Muscular Rheumatism." to be opened by Dr. A. P. Luff; that in the Section of Surgery on the "Diagnosis and Treatment of Primary Carcinoma of the Stomach," to be opened by Mr. G. H. Makins, C.B.; and that in the Section of Gynæcology and Obstetrics on "Affections of the Urinary Tract Complicating Pregnancy," to be opened by Sir J. Halliday Croom. The Section of Medical Sociology will attract considerable attention this year, for one of the subjects down for discussion therein is "Hospitals in Relation to the State, the Public, and the Medical Profession," to be opened by Professor Benjamin Moore, Mr. J. G. Gibbon, D.Sc., Prof. W. Pfeiffer, Dr. Adolf Gottstein (Charlottenburg), and Prof. Grober (Jena).

The Social Functions.

To-night there is to be a concert and ball to be held in the Pavilion and Dome by invitation of the Mayor of Brighton. The annual dinner takes place on Thursday evening in the Hove Town Hall. On Friday evening the local Division is giving a soirée in the Hove Town Hall. On Thursday afternoon the Mayor of Hove, Alderman Barnett Marks, has invited a large number of members to a garden party in the picturesque grounds of St. Ann's Well Gardens. Numerous excursions and visits to places of interest in the neighbourhood have been arranged for. Dr. Hugh Stott, the Mayor of Lewes, has invited a party to visit the historic county town of Sussex, and the visitors will afterwards be entertained at tea by Mr. and Mrs. Frankfort Moore. The Duke of Norfolk has graciously thrown open his magnificent seat, Arundel Castle, to a large party. Other places included in the programme are Chichester, Tunbridge Wells, Eastbourne, Shoreham, Worthing and Portsmouth. A Masonic reception will take place this afternoon immediately after the Church service, by kind invitation of the W.M. and Wardens of the Hova Ecclesia Lodge.

The arrangements made for golfers are excellent in every way. The Hon. Secretary of the Golfing Subcommittee is Dr. P. Stanhope Eves, 14 North Street, Brighton, and the principal event is the competition for the Ulster Cup, which was presented to the Association by the Ulster Medical Society in 1909. This will be played for on Thursday, July 24th, at the East Brighton Golf Club, 18 holes, bogey play, under handicap (limited to 18). Lady visitors, members of recognised golf clubs, may be made temporary members of the Ladies' Golf Club at the Dyke. Tennis and cricket are also provided for.

It will be seen that nothing has been left undone to ensure the comfort and happiness of members of the Association and their wives attending the annual meeting at Brighton.

The Exhibition.

Members should not fail to make a tour of the annual exhibition, held in the Corn Exchange adjoining the Dome. Here they will find displayed in tempting fashion the latest thing in foods, beverages, drugs, instruments and books. It has been decided this year to keep the exhibition open on Wednesday night, the occasion of the Mayor's soirée. In spite of the fact that the International Medical Congress will be held so soon after the Brighton meeting in London, it cannot be said that the customary attractiveness of this annual display has diminished aught thereby, and therefore members will miss a good deal if they do not seize the opportunity, at least once during their visit, to walk round the stalls and inspect the various exhibits.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, July 19th, 1913.

At the Gynæcological Congress, Hr. Kehrer, Dresden, introduced the subject of

The Lime Constituents of the Blood in Physiological and Pathological Pregnancies and in the Puerperium.

In normal pregnancy, he said, the lime constituent in the blood was raised. In nephritis gravidarum there was a slight diminution of lime, and in eclampsia a more considerable diminution. In the normal childbed, on about the ninth or tenth day, there was a considerable diminution, due to loss of blood, secretion of milk, and perhaps to the diminished food supply, which was deficient in lime in the early part of the puerperium; it might stand in some relation to the tetanoid condition that was present in 80 per cent. of all lying-in women. During the lying-in period of women who had suffered from nephritis or eclampsia during pregnancy there was a striking increase in the lime constituent.

Hr. Lampe, Munich, discussed the relation between

Basedow's Disease and the Genitals.

In all the cases observed, 25 in number, of Basedow's disease a protective ferment was found as against the Basedow thyroid, and in most cases against the thymus and ovary—*i.e.*, the Abderhalden reaction was positive with Basedow serum plus thyroid in all the cases, and in most with Basedow serum plus thymus, and Basedow serum plus ovary. Samples of Basedow serum plus other substances—kidney, liver, muscle tissue, etc.—all failed to show the reaction. From these evidences it appeared that Basedow's disease was a dysthyroidism, that in most cases of the disease the thymus failed to act properly, and that the germ glands in most cases underwent a deviation from the normal. The diminished function of the germ glands was therefore to be looked upon as secondary to the imperfect functional activity of the thyroid. The matter was further discussed by Hr. v. Graff and J. Novak, Vienna. After examination of 36 women suffering from Basedow's disease the following conclusions had been reached:—Basedow's disease was frequently associated with signs of infantilism and disturbances of menstruation which, generally as oligo- or amenorrhœa, preceded the disease. In many cases the disease stood in a timely and probably causal relationship with the three most important phases of sexual life—viz., puberty, gravidity and the climacteric. In many cases the cause of the Basedow's disease must be sought in the hypo-function of the genital apparatus. Two illustrative examples were noted—viz., outbreak of the disease after operation and sterilisation of the healthy woman by application of the Röntgen rays. The speakers then passed on to thyroid and gestation. Enlargement of the thyroid commenced during gestation only in from 44 to 49 per cent. of the cases. In an exhaustive examination of women before the commencement of pregnancy (500 women were examined), 40 per cent. of them suffered from struma. An increase took place during the actual labour, but a diminution during the puerperium. Glycosuria, both spontaneous and alimentary, was more frequent in women with enlarged thyroids than in those without enlargement. In eclamptic cases the enlargement of pregnancy was frequently absent. The evidence before them tended to disprove the assumption that the climacteric furthered the disposition to the development of goitre.

Hr. Schickele, Strassburg, spoke on

The Substances that Excited Uterine Contractions and Internal Secretions.

The exciting substance in pituitrin had nothing to do with the heightened blood pressure. It was present in extracts of hypophysis (both anterior and posterior lobes), which had no pressure-raising action. There-was no specific action, therefore, in the posterior lobes. Substances that excited uterine contractions were to be met with outside the hypophysis, as, for instance, in the ovary, corpus luteum, uterus, thyroid, mammary gland, as well as in the fœtus and placenta. The blood serum of the umbilical cord, as well as that of the pregnant woman herself, also contained it. It was also true of the kidneys, liver and spleen. These substances were present both during pregnancy and at other times. It could not be determined with certainty that the action was stronger during pregnancy than at other times.

Hr. Kalledey, Budapest, read a paper on the

ÆTIOLOGY AND ORGANOTHERAPY OF HÆMORRHAGE FROM THE UTERUS.

He had treated 21 cases of dysmenorrhœa with ovarian extract. In all the cases complete recovery was brought about. Of these 21 cases five were pregnant. From these observations the speaker concluded that dysmenorrhœa was due to a hypo-function of the ovary. The speaker also treated meno- and metrorrhagia with extract of the hypophysis, also with a good result. With extract of corpus luteum he had succeeded in arresting hæmorrhages in five cases.

AUSTRIA.

Vienna, July 19th, 1913.

RADIUM RAYS IN THE TREATMENT OF UTERINE CARCINOMA.

The discussion of Dr. Wertheim's communication on the radium treatment of uterine carcinoma was carried on at the recent meeting of the K.k. Gesellschaft der Aerzte in Vienna.

Dr. A. Jungmann stated that he had been treating lupus cases with radium radiations since 1905. Up to the present his series of patients in this department totalled 650. Among those were 350 cases of chronic cutaneous tuberculosis; and his experience tended to prove that radium is a powerful therapeutic agent in this special domain of clinical pathology. It proved specially effective in the treatment of lupus of the mucous membranes. Among his radium patients there were also 160 cases of carcinoma. Most of these cases were of cutaneous cancer of a more or less aggravated type; but there were also some of deep-seated cancer: some inoperable; some who had refused to be operated on; and others who had come in subsequent to operation. Jungmann here laid stress on the general fact of his experience that radium presented a possibility to patients, who, according to all pre-existent laws of surgical prognosis and practice, would have been given up for lost, and left with nothing to look forward to but an early and agonising termination of life, of—at least in a considerable proportion of cases—a substantial prolongation of life under conditions by no means so burdensome. Recurrence did, indeed, take place in many instances, nevertheless the fact remained that, even in such cases, a repetition of the treatment—continuously maintained—had the effect of maintaining the patient in good condition. He advocated the administration of large doses in the treatment of carcinoma, inasmuch as the fact had long been recognised that small doses had but an irritant effect.

RADIUM TREATMENT OF PROSTATIC TUMOURS.

Dr. R. Paschkis had treated an inoperable sarcoma of the prostate with radium radiations, and the patient, after an interval of two and a half years, still maintains the appearances of complete recovery. No result had been obtained in the treatment of a number of malignant tumours of the bladder. The explanations advanced for the failure of radium therapy in those cases—over and above the fact that they were always very far advanced, sometimes inoperable, and sometimes even recurrent—was that the quantity of radium, and the time-period of its application, were too limited in each case. He had never seen erasion or direct cauterisation applied to the mucous membrane of the bladder; but he had appled the radiations, *experimenti causa*, for a long time to a quite small papilloma of the otherwise normal bladder of a female patient. The result was that the papilloma remained unaffected, and the mucous membrane normal. He had also applied the radiations *per urethram* in two cases of prostatic hypertrophy. Both these were old men who had been affected for years; and in each case the local change had produced chronic and complete retention of urine, without any change of the general condition.

CLINICAL VALUE OF RADIO-ACTIVITY: RADIUM *v.* MESOTHORIUM.

Dr. E. Ranzi stated that for the past four years radium rays had been employed in von Eiselberg's clinic: in the treatment of inoperable tumours; and in the after treatment of those cases in which operation had been resorted to, and complete extirpation found impossible. A beneficial effect was distinctly noticeable in a good many of the tumours; in one case, indeed, the primary tumour disappeared completely. On the other hand, some cases proved completely refractory to the radiations; in one instance, the application of the rays actually seemed to increase the rate of growth of the tumour every time they were employed. In a relatively small number of cases, there had been some hæmorrhage after the application of the rays. This would suggest the desirability of caution in the employment of the radium rays in the vicinity of large blood-vessels.

Dr. L. Freund stated that when carcinomatous tissues were exposed to radium radiations in small quantity, the superficial layers of the new growth were unquestionably destroyed. But this destructive agency did not reach the deeper structures: partly on account of the fact that the intensity of the radiations varied approximately, as the inverse square of the distance, and partly on account of the absorption of the rays by the tissues penetrated. The deeper layers of the tumour, and the scouts of the new growth, the infected lymphatic glands, which from the beginning occupied a position widely separated from the primordial mass, were reached by a dose of radiations which were so far from being destructive that they were merely irritating; accordingly, we find that the glands grow vigorously while the superficial layers of the original cancerous growth are shrinking. On this account, dosage with small quantities of radium rays is suited to the treatment of quite superficially situated, and shallow, carcinomatous growths. So our efforts must be directed to the raising of the distant effect of the radiations to the highest available standard. It is only this distal action that can give any special value to the treatment of large tumours with radium or mesothorium; in its absence there is no appreciable difference obtainable which can tend to rank such above the other incompletely radical methods of removal of malignant growths. Such essential increase of "action at a distance" can be obtained only by means of powerful sources of radiation—such as can over-compensate for the weakening of the rays by tissue absorption and effect of distance. Such sources require the presence of large quantities of the radio-active material. We cannot yet determine whether radium or mesothorium will prove to be the survivor in this competition for ultimate clinical precedency.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

PROFESSORSHIP OF BACTERIOLOGY, UNIVERSITY OF EDINBURGH.

As was very generally anticipated and desired, the Curators have appointed Dr. James Ritchie, Superintendent of the Royal College of Physicians Laboratory, to be the first incumbent of the new Chair of Bacteriology. Dr. James Ritchie is too well known in Edinburgh for it to be necessary to utter any encomium on his appointment. He is a graduate of Edinburgh, and served as resident under Professor Greenfield. Thereafter he went to Oxford, where he was successively Lecturer, Reader, and Professor of Pathology. When Dr. Noel Paton resigned the Superintendentship of the College of Physicians' Laboratory in order to take up his duties as Professor of Physiology in Glasgow, it was universally felt that the College was fortunate in being able to secure Dr. Ritchie's services, and under his control the Laboratory has flourished exceedingly. Dr. Ritchie's contributions to bacteriology are numerous; among them we may mention the textbook of which, along with Professor Muir (Glasgow), he is author. In the meantime, Professor Ritchie will not sever his connection with the College Laboratory, as it is understood that, pending the creation of a University Bacteriological Department, arrangements are in contemplation for his continuing his work there. The University has made a fortunate selection in electing Professor Ritchie.

Clinical Teaching in Edinburgh.

At the same meeting of the University Committee at which Dr. Ritchie's appointment was announced, there was also made public the fact that the University had entered into an agreement establishing a close and intimate relationship with the Royal Infirmary as to the work of the Pathological Department and as to the teaching of clinical medicine, surgery and gynæcology. Without entering into details of the agreement, which are, of course, of purely domestic interest and depend on the local circumstances, the general tenour of the document is to create a Board of Selection for teaching appointments, consisting of representatives of the Infirmary Board, the University, and the Royal Colleges. This Selection Board reports two names to the General Board of Managers. Another matter settled by the agreement is the status of the Professor of Pathology, who hitherto has had no connection with the Pathological Department of the Infirmary. Now, the Professor of Pathology is to be consulting pathologist to the institution; the present pathologist continues in office, and is appointed lecturer on morbid anatomy by the University. The four senior ordinary physicians become senior lecturers on clinical medicine, and examiners; the assistant physician, lecturer on clinical medicine, with a fixed honorarium; while the University is to pay and appoint clinical tutors. The senior lecturers, with the University clinical professors, are to form a Board to control clinical teaching. The privileges of the extra-mural students are safeguarded in the agreement, but the whole effect of it will be to bring clinical teaching and pathology more and more under the control of the University, as now appears inevitable in view of the changes which are at present taking place in medical educational methods, and the increasing costliness of equipment.

Power of Scottish Insurance Commissioners to Prosecute.

An important decision has been given by a full bench of judges in the Justiciary Appeal Court. The bench consisted of the Lord Justice-General, the Lord Justice-Clerk, and Lords Johnstone, Dundas and Guthrie. The question was raised on an appeal against convictions under the National Insurance Act obtained at the instance of the Commissioners for non-payment of contributions on behalf of servants. The competency of the complaints was objected to on the ground that the Commissioners had no title to prosecute, and this appeal was sustained by the Court, which quashed the convictions and allowed the appellants full expenses. The leading judgment was given by the Lord Justice-Clerk, who enumerated the four qualifications recognised in Scotland as conferring the right to prosecute, the last of them being a statutory right. The Insurance Act, although it gave the Commission power to sue, was silent as to any power to institute criminal proceedings, nor could it be clearly inferred from the wording of the Act that it was the intention of the legislature to confer such power. Lord Dundas, concurring, said that it must be inferred that the Legislature, while providing that the Commissioners might sue, had deliberately refrained from giving them the right to prosecute. No person other than the Public Prosecutor was entitled to prosecute unless the Statute so provided. Lord Guthrie, who also agreed, said it would be no public loss if the result of this decision was to lead those responsible for framing Statutes to see that, if power to prosecute was desired, it was expressly given. Lord Johnstone concurred. Lord Dunedin said he had only a vote in the case of divisions among their Lordships, and their Lordships were unanimous. He indicated that he might have been prepared to take the leap and hold that power to prosecute was implied. He was most emphatically of opinion that with the assistance of the Scottish Law Officers the matter ought to have been made perfectly clear in the Statute.

Assistant to the Edinburgh Medical Officer of Health in Connection with Sanatorium Treatment.

For this appointment, to which a salary of £500 per annum attaches, there were only three applicants, of whom Dr. John Gray, County Tuberculosis Officer, Gloucester, was elected. He is a Glasgow graduate, and has filled the position of Assistant Police Surgeon at Bradford, Assistant Superintendent of Leeds Infirmary, and Superintendent of the Sanatorium at Bridge of Weir.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

ALCOHOLIC QUACK MEDICINES.

To the Editor of The Medical Press and Circular.

Sir,—Inasmuch as in my evidence before the Select Committee I gave a prominent place to alcoholic quack medicines, I have been interested in the correspondence under the above heading that has been going on in your pages. I agree with writers who point out what a vast amount of injury is being inflicted by these compounds. This was forcibly suggested indirectly in Prof. Saundby's clinical lecture which gave rise to the discussion. Many quack medicines are in themselves merely inert trash; they do harm only in such cases as pass into chronic or mortal phases owing to delay in applying scientific treatment. This indirect injury is bad enough, whether it leads in simple cases only to such minor results as complete loss of hair in curable alopecia, or in serious diseases to grave endings, lingering torment and death from lupus or cancer. The peculiarity of the alcoholic nostrum is that it inflicts actual injury upon at least 95 per cent. of the people who employ it. Alcohol is not a remedy for any disease, and where it is able to mitigate for a short time the symptom of mental depression it does it at the cost of reaction, pernicious and damaging in a high degree. My evidence before the Committee was restricted to the question of newspapers and quack advertisements. My task was to show that the newspapers were either aware of the nature of the traffic they were abetting, or more or less culpably negligent in not taking notice of the facts constantly being thrust upon their attention. The majority of leading papers either have medical men on their staffs or have regular medical contributors, and if the proprietors had any real desire to keep their pages clean they could soon put an end to the present scandal. Papers of inferior class justify themselves on the ground that quack advertisements find ready admission to their contemporaries of the highest class, and to those that set themselves up especially as the enemies of humbug and fraud. All the newspapers assume the *rôle* of patriots, defenders of the national honour, guardians of the welfare of the poor. It is, I repeat, a gross scandal that the majority of these papers should be deriving great incomes from a traffic the nefarious character of which they must be fully alive to.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common.
July 17th, 1913.

OBITUARY.

THE HON. WILLIAM HENRY LANGLEY, C.M.G., F.R.C.S.I.

Particulars have now come to hand respecting the fatal illness and untimely death of this distinguished Irishman, the Principal Medical Officer of Southern Nigeria since 1911, formerly Deputy Principal Medical Officer in Northern Nigeria, and Principal Medical Officer in the Gold Coast Colony. Dr. Langley was only 44 years of age at the time of his death. He had enjoyed good health up to the middle of last April, but about that date he first showed signs of impaired vigour. He had recently passed through a strenuous time during a tour of service in discharge of his official duties, and the mental strain evidently had told upon him. Under medical treatment his condition improved for a while, but on June 1st feverish symptoms set in. These were accompanied by bloodlessness, and he sank from heart failure on the evening of June 11th.

The funeral took place at four o'clock on the afternoon of the following day with full military honours. The Deputy-Governor of Southern Nigeria, in the absence in England of His Excellency Sir Frederick Lugard, the Governor, Members of the Executive and Legislative Councils, and other officials attended From Government House, Ibahan, the funeral cortége slowly passed to the Colonial Church, at which it was met by the Right Rev. Bishop Tugwell and the Colonial Chaplain. The coffin, covered with beautiful wreaths, rested before the chancel during the first part of the burial service. At the cemetery the remainder of the service was read very impressively by the Bishop, and when the firing party had performed its sad duty the "Last Post" was sounded, and the many who were present silently bade farewell to their much-lamented friend and colleague.

Dr. Langley received his medical education at the Carmichael College of Medicine, Dublin, and at the Royal College of Surgeons in Ireland. In due course he became a Licentiate of the Irish Colleges of Physicans and Surgeons, taking the Fellowship of the College of Surgeons in 1902. His official career was very distinguished. He served in the Borgu operations of 1897-98. for which he received a medal and two clasps; in the Kontagora Expedition of 1900, for his services in which he was mentioned in despatches and received a medal and clasp; and with the Kano Sokoto Expedition of 1903, his services in which were rewarded with special mention, a clasp, and the honour of Companion of the Most Distinguished Order of St. Michael and St. George. In an official communication to the Right Hon. Lewis Harcourt, M.P., Secretary of State for the Colonies, His Excellency Sir Frederick H. Lugard, Governor of Southern Nigeria, wrote under date June 12th: "Dr. Langley's death is a very great loss indeed to Nigeria. I had intended to recommend him to you for the proposed appointment of Director of Medical Department under the scheme of amalgamation. There is no officer in the West African Medical Service who has the personal knowledge of both Protectorates possessed by Dr. Langley. I have known him intimately since I recommended him for appointment, and I feel his death keenly as a personal loss."

And in an official communication from the Colonial Office, dated June 4th, 1913, to Dr. Langley's brother, who lives in Dublin, the following extract from a letter sent the previous day to his sister is given in the form of a despatch: "Mr. Harcourt desires to associate himself with the terms in which Sir F. Lugard refers to the late Dr. Langley, whose unfailing tact, good temper, and keen practical intelligence, united to his great experience of West Africa renders him exceptionally well fitted for the important post for which it had been Sir F. Lugard's intention to propose him."

Lastly, the *Southern Nigerian Government Gazette Extraordinary*, Lagos, Thursday, June 12th, 1913 (Vol. VIII., No. 37), contains the following paragraphs:—

"It is with the deepest regret that his Honour the Deputy Governor has to announce the death of the Honourable W. H. Langley, C.M.G., Principal Medical Officer, Member of the Executive and Legislative Councils, which took place suddenly at 9.30 p.m. on the 11th instant."

"Mr. James feels that he will be carrying out the wishes of His Excellency the Governor in expressing in this form the deep general sense of the great loss that not only the Government, but also the whole European and native community of Southern Nigeria have suffered in the untimely death of this distinguished officer.

"Dr. Langley, apart from the great services he has rendered to West Africa as Deputy Principal Medical Officer in Northern Nigeria, as Principal Medical Officer in the Colony of the Gold Coast, and recently as Principal Medical Officer of Southern Nigeria, can well be said to have endeared himself by charm of manner and quality of mind to all with whom he came in contact, whether officials or non-officials, throughout West Africa."

REVIEWS OF BOOKS.

TROPICAL MEDICINE. (a)

There is no difficulty in understanding the appreciation which the medical public displayed in their reception of the first issue of this genuinely epoch-making text-book of one of the most modern and most important of all the sciences—and the appurtenances thereof. The volume is thoroughly encyclopædic in the comprehensiveness of its range of vision and appropriation of material, and the fact that it was practically the first in time, as well as spaciousness and quality, to deal with one of the most important of the Imperial concerns of our cosmopolitan British Empire has contributed to make it one of the most brilliantly valuable —whether considered from the mental or material view-point—of the whole "University Series" which collectively represents so well the contemporary high-water mark of British Medicine and Surgery. The dedication to Sir Patrick Manson, "the Founder of Scientific Tropical Medicine," serves as a frontal index of the high ideals of duty and discrimination at which the authors and publishers have so successfully aimed.

In this second issue the authors have displayed in the necessary revision, addition, and increased illustration the same untiring energy and discriminating zeal which were so well portrayed in the first edition. The result now before us—a demy 8vo of xxxii. and 1,747 pages, illustrated with 15 coloured plates and 630 "figures in the text," is one which it would be but ridiculous pretension on the part of a reviewer to criticise seriously within the limits of his allotted space. The conscientious—even devoted—care which has been bestowed upon the accumulation and arrangement of facts garnered from near and far, is displayed throughout every paragraph of this truly colossal work. In fact, the meticulous precision which characterises the presentation of every item conveys something of a prickly sensation to the touch of the reviewer of long-time experience—whose jaded organs of mental sensation have had so little practical reason to anticipate such collision. We feel pretty sure that it was the excess of conscientious devotion to absolute accuracy which dictated the spelling of *Agchylostomiasis,* which, while suggestive of pedantic perfection in the department of etymological research, is decidedly misleading in the present state of English orthography as she is (so very *non*-)phonetically taught. But—such is the impression made by the contents of this truly splendid contribution to the history and practice, the science and art, of medicine—that we feel as if we owed an apology to the authors for firing off this small squib in way of schoolboyish assertion of our privileges. We regard this *Manual of Tropical Medicine* as nearer to perfection in aim and attainment than any that we have had the privilege—the word is chosen with deliberation—of examining in the course of the performance of our critical function for many a long year. No earnest physician at home can afford to be without a copy of this work in his study—and the volume will surely continue to be the indispensable *vade mecum* of every British colonial practitioner, even outside the tropical limits.

(a) "Manual of Tropical Medicine." By Aldo Castellani, M.D. (Florence), Privat-Docent (Naples), Director of the Clinique for Tropical Diseases, Ceylon, Professor of Tropical Medicine and Lecturer on Dermatology, Ceylon Medical College, Member of the Royal Society's Commission on Sleeping Sickness in Uganda, 1902-1903; and Albert J. Chalmers, M.D. (Vic. & Liv.), F.R.C.S.(Eng.), D.P.H.(Cam.), Director, Wellcome Tropical Research Laboratories, Khartoum, etc., etc. Second Edition. (University Series). London: Bailliere, Tindall and Cox. 1913. Price 21s. net.

MEDICAL ELECTRICITY. (*a*)

SEVERAL years have passed since the appearance of the last edition of this book. We prophesy that this, the sixth edition, will have a rapid sale, because it is the standard work which should be consulted by all medical practitioners who employ electricity in the treatment of disease. The number of such medical men is steadily increasing year by year as the scientific writings on the subject have slowly dispelled the cloud of prejudice which used to envelope the employment of electricity in conditions other than muscle-testing. The subject-matter of Dr. Lewis Jones' volume is clear and concise, yet makes easy and agreeable reading.

This edition is thoroughly revised, parts being completely re-written, without greatly increasing the size of the book. There are sections on high frequency, diathermy, galvanic, faradic, and sinusoidal currents, static electricity, and on the use of condenser discharges for electrical testing. There are also chapters on first principles, medical batteries and apparatus, with instructions as to the use of the popular panto or multostat. The Röntgen rays are discussed just as far as is needful for the beginner, as that subject has developed of late years so much that it could not be fully dealt with in a volume containing so much information on other forms of electricity. Perhaps the most interesting chapters are those on Physiological Considerations and General Therapeutic Considerations, which are succeeded by chapters dealing with the treatment by electricity of general diseases, diseases of the nervous system, diseases of the circulatory system, of the respiratory organs, of the digestive tract, of the urinary and reproductive organs, of the joints and fibrous tissues, of the organs of the special senses, and of cutaneous affections. So full a list of diseases yielding to electricity must indeed surprise those who never employ that method of treatment.

Throughout the book, cases are narrated with references to the literature, a method which greatly adds to the interest and the usefulness of this work. Dr. Lewis Jones has had a large experience, and he has not hesitated to assist his colleagues by giving freely of the knowledge he has gained by years of practical work.

CLINICAL PATHOLOGY. (*b*)

THIS book presents an account of the laboratory investigations, whether chemical, histological, or bacteriological, which have a practical bearing upon the diagnosis and treatment of disease. Not more than two different methods of reaching the same object are described. The book is well arranged, on the whole pleasantly written, and is in most respects a trustworthy guide. Its worst fault is an exuberance of certainty which may appeal to the student, but will be accounted for want of breadth of view by many readers. The opening chapters deal with the blood, and in this section very numerous criticisms might be made. The origin of the large hyaline leucocyte suggested by the author is surely unique, and the cell he calls a "transitional myeloblast" on Plate I. forms a quaint picture. The red cells are said to show "apparent amœboid movements" in pernicious anæmia. We are told that blood plates are increased in myelocythæmia. Lymphatic leucæmia is said to be the least common of the "primary anæmias." Six millions per c.mm. is given as the average number of red corpuscles in health.

On page 27 we read: "If that (examination of a blood film) is to be taken as the criterion of our diagnosis, then I have seen an infant pass calmly through an attack of acute lymphoid leucæmia with nothing more deadly than a whoop, and another child shake off in rapid succession the onslaughts of myeloid leucæmia and pernicious anæmia." A most irresponsible statement!

Rogers' work or cholera has apparently been overlooked when we are told that the specific gravity of the blood is of little moment. Hayem's diluting fluid finds no mention, and is better than the formulæ given. The section on bacteriology is more satisfactory. "Anthrax infections in man are extremely rare." What of Bradford? Sections follow on puncture fluids, the urine, the products of different systems of the body, and on histology. Kjeldahl's method is not described on the ground that it is too difficult for ordinary clinical use. This is extraordinary, as second-year students may be required to do a Kjeldahl estimation as part of a professional examination. Hüppert's test for bile is better than those mentioned. We regret to note a great deal of very careless writing. "The relative predominance of *one* of these cells" (p. 191). "Do not blow the plug (flame) out" (p. 152). "Add one drop of ferric chloride" (p. 297). "There is a considerable epidemic of these urines" (p. 226). "If muscle fibres are absent, vegetable fibres may be recognised . . ." (p. 253). We are told the guinea worm is about the thickness of a piece of string (p. 354). We may add that its head is the size of a lump of chalk. There are over a dozen fine examples of the split infinitive. Guaiac is spelt without the initial *a*, and on page 339, we read "loose" for "lose." The story of the curate's egg, old though it be, should either have been told in full or omitted altogether. Space fails us to deal with errors of omission; they are not serious. It seems a pity that such a good book should have so many blemishes which could easily have been put right by a candid friend with a blue pencil.

EXISTENCE. (*a*)

THIS volume had accidentally escaped our notice for an interval too long for the anxious expectations of an ambitious author, and we feel in duty bound to express our regret for the lapse. The text furnished by the title is, indeed, a comprehensively inspiring one. We could, indeed, suggest few, if any, theses which could be made to furnish more ample material or wider range for systematic and syllogistic discussion. The man who undertakes such a task, with sanguine anticipation of success, must be one who had courageously adopted everything knowable as his intellectual province, and had even succeeded in the conquest of that measureless domain with the aid of a persevering skill that has hitherto been given to few, if any, of the most philosophically ambitious.

We should at once say, before proceeding beyond the title page, that the author of this volume is both young and enthusiastic, in years—scientific years, at least—as well as in devoted pursuit of philosophic research and evangelisation. And our perusal did not fail to call up sadly chastened recollections of our own early enthusiasm for scientific attainment—of the days, in fact, in which we fondly hoped that if but a couple more decades could be secured for our terrestrial pilgrimage, and circumstances permitted uninterrupted intellectual progress at the rate of geometrically increasing velocity at which we believed ourselves to be then advancing—why, we would actually know everything—science, philosophy, and the innumerable *et ceteras*. How sadly has the slow but all too sure, disillusion of added years and experience tinted the roseate hue of that prospective vista now that so considerable a section of the same has

---

(*a*) "Medical Electricity." By H. Lewis Jones, Consulting Medical Officer to the Electrical Department in St. Bartholomew's Hospital. Sixth Edition. Pp. 551. London: H. K. Lewis. 1913. Price 12s. 6d. net.

(*b*) "Clinical Pathology." By P. N. Panton, M.A., M.B., B.C.Cantab., Clinical Pathologist to the London Hospital. Pp. 446. London: J. and A. Churchill. 1913.

(*a*) "The Significance of Existence." By I. Harris, M.D. (Koenigsberg), L.R.C.P. and S. Pp. 326. London: Longmans, Green and Co. 1912. Price 6s.

been traversed. And we incline to fear a corresponding experience for the author of the present volume.

Dr. Harris begins at the root of things, and in this regard his conception of scientific exposition would appear to aim at a standard of scientific thoroughness suggestive of that of Lucretius. His text is arranged in sixteen chapters, of which the first is devoted to consideration of "Infinite and Finite." The exponential philosopher who undertakes to discuss the combined and respective connotations of these terms should surely be dowered with clarity ot thought and precision of language. We can hardly compliment our author on the display of either one or the other. The opening sentence is: "All living protoplasm is susceptible to stimulation by its environment and reacts on it in a certain definite manner." And that next following is thus worded: "A sensation becomes the more complex with ascending animal development respectively with the evolutionary stage of a particular organ." The skilled reader will surely agree that science and inspiration are not transmissible by the media of slipshod grammar and conspicuously unkempt diction. And the language and thought of these sentences are maintained throughout every paragraph and chapter of Dr. Harris's work—in discussion of "General Laws of Nature," Purpose, Happiness, Reason, Instinct, Religion, etc., etc.—down to, and through that of "Recapitulations and Conclusions." The last-named—the concluding chapter, opens with the statement: "All existence is an indivisible entity." And we soon reach the sonorous enunciation of a confident belief: "Existence contains from all time and for all time exactly the same potentialities," which is followed by the announcement of: "The fact that to finite beings all forms of existence realise themselves in a series of ascending evolutionary stages depends on their finite proclivities." Such are the guiding sparklets which lead to the will-o'-the-wisp phosphorescence of the concluding sentence of this illuminating paragraph: "From the point of view of the absolute existence there can be no essential difference between existence in patentiâ and in reality."

Why do people think it right to inflict such volumes on a much-suffering humanity?

BARNARD AND STOCKER'S MEDICAL PARTNERSHIPS. (*a*)

THIS volume has been out of print for some time. A new edition has accordingly been called for, and an opportunity has thereby been afforded to the authors of bringing their book more into line with recent decisions affecting the relations between medical men and the agreements giving effect thereto. This book supplies all the needed information regarding the mode of estimating the value of medical practices, the form of articles of partnership, forms of assignment of medical practices, agreements between principals and assistants, and points relating to assistantship with a view to partnership. The law on all these subjects is fully referred to, and numerous legal decisions quoted. The Partnership Act of 1890 is specially dealt with, and notes are given on such of its clauses as are especially likely to affect medical men in partnership. As a useful work of reference this volume will be found extremely helpful to those intending to purchase or to sell a practice, as well as to medical men employing assistants or entering into partnership. We have no doubt that this new edition will be even more popular than its predecessor.

HOW TO CUT THE DRUG BILL. (*b*)

THE author respectfully recommends this book to the Insurance Commissioners "as the text-book for which they are seeking." It appears to us that the author, whose appointments, as stated on the title-page, number a round dozen, including that of Medical Officer to the Southall Jam and Preserving Company, seems to have quite overestimated the importance of his book when he states that it "will prove of inestimable value . . . . to the consultant." In fact, it is hardly worth the reviewer's while to criticise this volume, as the author has already sung its praises sufficiently in his own preface. In a new chapter on invalid foods he refers to those included in his survery as being "guaranteed as of sterling quality." By a curious coincidence every one of the "foods" mentioned appear on the advertisement pages of his book with the single exception of Trommer Elixir. The proprietors of these preparations are lucky in securing such prominence for their wares. The reader is certainly struck by the fact that out of the nineteen advertisements contained in this book the subject matter of only one of these is not dealt with in the text, and this for the simple reason that the one exception is Mr. Hart's own publisher's announcement. The book is accompanied by a green filing card, on which we notice that the word "prescription" is twice wrongly spelt. We should hardly imagine that consultants will find much to interest them in a book of this kind.

AIDS TO GYNÆCOLOGY. (*a*)

THIS evidently popular volume of the "Aids" series has been entirely rewritten and brought up to date—and this process of rejuvenation was necessary, because in hardly any branch of medicine has more progress been effected than in gynæcology. The schematic, more or less "literary" classifications of twenty years ago have given place to more purely surgical and strictly clinical descriptions under pathological rather than anatomical headings. The transformation has been satisfactorily carried out by the author, though we miss some of the illustrations of the earlier editions; in spite of their more or less diagrammatic character they certainly helped to elucidate the text.

Gynæcology is essentially a practical science, and must be learned rather than taught. The most voluminous treatises fail to convey the indispensable "tactus," and as few students can hope to acquire this during the curriculum, the initial knowledge required for examination purposes can be better obtained from a small, didactic work such as this.

VICIOUS CIRCLES IN DISEASE. (*b*)

THE superb binding and lavish use of clarendon and antique type in this book seem to indicate that the author has been riding a hobby while adding to our mental equipment. He has been assiduous in collecting materials to conform to his figure, and if in his zeal he has circled one or two squares who shall blame him? "Chlorosis-metrorrhagia-chlorosis" is one we may quote. Now, metrorrhagia causes secondary anæmia, and probably never alone causes chlorosis, while in true chlorosis metrorrhagia is uncommon. There is a useful chapter on artificial circles, where such factors as social conditions or injudicious treatment form part of the chain. The author gives the following circle—viz., morphinomania—dyspepsia—anorexia—morphinomania. We can present him with one more remarkable—viz., morphinomania—dyspepsia—arorexia and vomiting—abdominal section—morphinomania. This circle in is entirety has been traversed by the same patient four times. If the author does not add greatly to our knowledge he has acquired merit in arranging existing knowledge in a form which must often be of practical value.

(*a*) "Medical Partnerships, Transfers and Assistantships." New Edition, revised and amplified. By Wm. Barnard, M.A. LL.B., Barrister-at-Law, and G. Botram Stocker, Managing Director of the Scholastic, Clerical and Medical Association Ltd. London: The Scholastic, Clerical and Medical Association, Ltd. 1913. Price 10s. 6d. net.

(*b*) "How to Cut the Drug Bill." By A. Herbert Hart, M.S. London: John Bale, Sons and Danielsson, Ltd. 1913. Price 2s. 6d. net.

(*a*) "Aids to Gynæcology." By Jervois Aarons, M.D.Edin., M.R.C.P.Lond., Gynæcologist to St. Anthony's Hospital, etc. Fifth Edition. London: Bailliere, Tindall and Cox. 1913. Price 2s. 6d.

(*b*) "Vicious Circles in Disease." By Jamieson B. Hurry, M.A., M.D. Second edition. Pp. 280. London: J. and A. Churchill. 1913. 7s. 6d. net.

LITERARY NOTES.

An important work on "Arterial Disease and Angina Pectoris," by Sir Clifford Allbutt, M.D., F.R.S., is announced for publication in the autumn by Messrs. Macmillan and Co.

* * *

We understand that arrangements have been made for the translation into English of Prof. Doyen's great work on the "Operations of Surgery." The original work is in five volumes, a second edition now passing through the press; but the translated edition will not exceed three volumes.

* * *

Warwick and Tunstall's "First Aid to the Injured and Sick" (Bristol: John Wright and Son's, Ltd.), has reached an eighth edition. The text has been thoroughly revised and some new illustrations added. It is one of the cheapest and best first-aid annuals with which we are acquainted. In paper it only costs 1s., while in leather cover the price is 2s. 6d.

* * *

"An Elementary Clinical Pathology for Nurses" is the title of a small book published by Messrs. J. and A. Churchill at 1s. It is written by Dr. George Herschell and Mr. Richard Weiss. It has reached a second edition. It deals with the examination of the urine, stools, vomit, sputum and blood, and concludes with the clinical diagnosis of diphtheria. Candidly, we consider this book is more suited for medical men and students than for nurses.

* * *

Miss Margaret French, Sister at the General Lying-in Hospital, Lambeth, has compiled a book which, we think, will be found very acceptable. It is entitled "Babies: A Book for Maternity Nurses." Messrs. Macmillan and Co., Ltd., are the publishers, and the price is 1s. net. It tells all a nurse need know about a young baby, such as bathing, dressing and feeding We note that the authoress recommends three-hourly feeds from the fourth week onwards. The treatment recommended for baby ailments is usually sound, but we think that the statement made regarding talipes, viz., "Severe cases are operated on at about two years," is very misleading. Apart from this and one or two other minor faults, which are quite pardonable, we regard this little guide to infant management as extremely accurate and common-sense in its teaching. We very cordially recommend it to nurses.

* * *

It it good to be reminded, when patients clamour to be sent to some Continental spa, that equal facilities may be had for obtaining various "cures" in our own country. A timely little handbook, containing notes on the therapeutics of radium in the waters of Bath, has recently been published by the Bath Corporation, with the approval of the Bath Medical Committee of the British Medical Association. It has been compiled by Mr. John Hatton, the director of the baths, in order to place before the medical profession the results of the recent investigations of the hot springs of Bath conducted by Professor Sir William Ramsay, K.C.B., F.R.S. Medical men intending to send their patients to Bath would do well to familiarise themselves with the many interesting papers contained in this handbook.

* * *

The present being the fourth issue of "The Social Guide," edited by Mrs. Hugh Adams and Edith A. Browne (London: A. and C. Black. 1913. Price 2s. 6d. net), presumably everyone knows that it is not, as its name might suggest, either a hand-book of etiquette or a reference list of persons "in society." It is, in fact, a hand-book of the social events of the year, or rather to such of them as are supposed to be of interest to London society, and a great deal of useful information it gives. If you want information about cricket matches at Lord's, polo at Hurlingham, racing at Punchestown, travelling in India, the season in Malaya, or West Indians in London, or any other unexpected subject, you will find it here. The book opens with a social calendar, but lacks an index.

MEDICAL NEWS & PASS LISTS.

Society for Relief of Widows and Orphans of Medical Men.

At the quarterly Court of the directors of this Society, Sir Thomas Boor Crosby, President, in the chair, the deaths of Mr. A. Willett, Vice-president, and Mr. L. Archer, Director, were reported. Two gentlemen were elected members of the Society. £1,333 was voted for the payment of the half-yearly grants to the widows and orphans on the books of the Society. Since the last Court three widows had died; one, whose husband had paid in subscriptions £26 5s., had been on the funds since 1885 and had received from the Society £1,540. The Acting Treasurer reported that the total amount received from the estate of the late Mr. James Brickwell was £37,250, bringing in a yearly income of £1,325 10s. A scheme for using this income was submitted to the Court, and was adjourned to the October Court for further discussion. A legacy of £250 had also been received from the executors of the late Mr. Windsor, of Manchester.

Membership is open to any registered medical practitioner who at the time of his election is resident within a twenty-mile radius of Charing Cross. The annual subscription is two guineas; special terms for life membership, varying with the age of the applicant. Full particulars may be obtained from the Secretary at the Offices of the Society, 11 Chandos Street, Cavendish Square, W.

Relief is only granted to the widows or orphans of deceased members of the Society, and the Secretary is constantly receiving letters from widows of medical men who have been left practically penniless, asking for relief, but this has to be refused, as their husbands had not been members of the Society.

Death of Four English Medical Missionaries in China.

A great loss to the medical profession as well as to the missionary cause in China has been caused by the deaths of four doctors from typhus fever. They are Dr. H. S. Jenkins, F.R.C.S.Eng., and Dr. Cecil F. Robertson, F.R.C.S.Eng., both of Sianfu, Shensi; Dr. Egerton H. Hart, of Wuhu, and Dr. F. Hall, of Peking.

Dr. Jenkins, of the English Baptist Mission, after studying at Bristol, qualified as M.R.C.S.Eng. in 1898, and in 1903 obtained both the M.D.Lond. degree and the F.R.C.S. qualification. He had held resident surgical posts at St. Mark's Hospital, London, and the Bristol Children's Hospital, and had been registrar and pathologist to the Mount Vernon Consumption Hospital, Hampstead.

Dr. Robertson, who was the youngest of the four doctors, received his medical training at the Middlesex Hospital. He qualified M.B., B.S.Lond. in 1907, and two years later took the Fellowship of the Royal College of Surgeons.

Dr. Hart, who was widely known in China, spent the last 18 years of his life in charge of the Wuhu General Hospital. It is believed that the attack of typhus fever which caused Dr. Hall's death was contracted from patients in the hospital or out-patient clinic of the Union Medical College in Peking, where for the past four months he had been Dean of the Faculty. He was only 35 years of age.

Gift of a Medical School to South Wales University.

At a meeting of the Council of the University of South Wales last week it was announced that Mr. W. J. Thomas, the Welsh coalowner, would bear all the cost of the new medical school and its equipment. The school will be among the best of the kind in the kingdom.

The Central London Ophthalmic Hospital.

The Duchess of Albany opened the new buildings of the Central London Ophthalmic Hospital last week. The Duchess was received by Lady Stradbroke and members of the committee and hospital staff. Mr. T. B. Archer, Chairman of the Committee of Management, said that the Duchess of Albany in July, 1911, laid the foundation-stone of the hospital, which contained two operating theatres—one for out-patients—a bacteriological and pathological department, X-ray room, museum, library, etc., and very large out-patients' rooms. Accommodation was provided for 24 beds, and they hoped that as the maintenance increased there would be a total of 40. The hospital had been completed without incurring debt, but more equipment was needed. They had spent £20,000. King Edward's Fund had contributed altogether £5,000, and the Zund Fund £3,000.

Vaccine Therapy at University College Hospital.

IT is announced that, owing to the generosity of Sir Harry Waechter in granting the sum of £300 for five years, University College Hospital will open a department for the treatment of disease by vaccine therapy.

Anderson's College Medical School, Glasgow.

THE following are the principal prizes awarded at the close of the session of Anderson's College Medical School, Glasgow:—

Anatomy.—Malcolm Kerr bursary—William Gordon, Russia, and William P. H. Lightbody, Glasgow, equal.

Physics.—Medical Section: Class medal, Norman S. Bruce, Glasgow; Dental Section: Class medal, Arnold J. Duncan, Newcastle-on-Tyne.

Zoology.—Medal, Miss Crawford, Glasgow.

Physiology.—Medal, George Christie Huntly.

Practical Physiology.—Medal, William Lightbody, Glasgow.

Materia Medica and Therapeutics.—Medal, Frederick W Thompson, Garliestown.

Dental Class.—Medal, William S. Murdoch, Garmouth, Morayshire.

Practical Pharmacy.—Medal, William Brown, Larkhall.

Practice of Medicine.—Medal, J. S. K. Boyd, Largs.

Operative Surgery.—Medal, Samuel Blyson, Glasgow.

Aural Surgery.—Medal, David Hardie, Leeds.

Diseases of Women.—Medal, J. Masson Greig and Douglas M'Alpine, equal.

University of Cambridge.

THE following degrees have been conferred:—

M.D.—J. W. Noble, Caius.

M.C.—L. Bromley, Caius.

M.B. and B.C.—E. L. K. Sargent and G. W. Spencer, St. John's; W. M. Oakden, Peterhouse; W. A. Pocock, Pembroke; J. Ll. M. Symns and J. B. A. Wigmore, Caius; A. B. Paul and A. S. Seabrooke, Christ's; E. Wordley, Emmanuel; R. Fisher and W. J. F. Symons, Sidney; J. F. Taylor, Selwyn.

B.C.—H. W. Comyn and E. S. Taylor, King's; K. B. Aikman, Clare; M. N. Perrin, Pembroke; M. Avent, Caius; J. R. Griffiths, Christ's.

University of Bristol.

AT the examination for the M.D. degree, Reginald S. S. Statham passed with honours. Emil Christoferson passed the final examination for the degrees of M.B. and Ch.B. Thomas S. Bradburn, Christopher C. C. Court and Percy Moxey passed the examination for the Diploma in Public Health. William R. Cooper and John R. Kay-Mouat passed Part I. of this examination. William H. Greet and Robert H. Turner passed the second examination for the degree of B.D.S.

University of Edinburgh.

AT the Graduation ceremony referred to in our last issue, the M.D. Degree was bestowed on the following:—Francis G. Bell, Oliver H. Blacklay, John F. Brown, John Brown-Lester, Leonard H. Bryson, William E. Bullock, B.Sc., Herbert M. Cargin, Walter D. Chambers, M.A., Noel A. Coward, John Cram, M.A., James Crocket, George H. Dart, Somerville B. Davis, Ian D. Dickson, John Drummond, William G. Evans, John Findlay, Arthur H. Firth, M.A., Ronald G. Gordon, B.Sc., Alexander G. M'P. Grant, Satis Chandra Sen Gupta, David K. Henderson, Harry F. Holmden, Thomas H. Horrax, Arthur J. G. Hunter, William D. Kirkwood, Robert A. Krause, William R. Logan, Donald M'Clintock, Frank B. Macdonald, Ranald Macdonald, George M'Mullan, John M. Macphail, Norman F. Mann, Benjamin B. Morgan, Robert F. Mudie, Harry G. G. Nelson, John J. H. Nelson, Hugh Paterson, John H. H. Pearson, Alfred A. W. Perie, Lieut.-Col. Kanta Prasad, I.M.S., Dorothy E. Pratt, Robert Proudfoot, George Raffan, George Richardson, George Y. Richardson, George H. W. Robertson, M.A., George M. Robertson, William A. Shafto, John J. M'I. Shaw, M.A., John I. Shepherd, M.A., Edgar W. Smerdon, Henry F. Smith, B.A., Willam R. Smith, B.Sc., Alexander Stuart, Bernard C. Tennent, Robert C. Walker, Willam G. Waugh, M.A., G. D. White, Frank M. Wilcox.

The Degree of Master of Surgery.—Kenneth Mackenzie, M.B., Ch.B., 1908 (with first-class honours), M.D., 1911 (Gold Medal for Thesis); Alexander P. Mitchell, M.B., Ch.B., 1907, M.D., 1909; Lancelot E. B. Ward., M.B., ChB., 1908 (with second-class honours).

Diploma in Tropical Medicine and Hygiene.—Alexander D. Stewart, M.B., Ch.B., Captain I.M.S.

Diploma in Psychiatry.—Percy W. P. Bedford, M.B., Ch.B., William Russell, M.B., Ch.B., Leslie H. Skene, M.B., Ch.B.

Royal College of Surgeons of Edinburgh.

THE following gentlemen, having passed the requisite examinations, on March 27th, 1913, were admitted Fellows of the College on Thursday last:—

Arthur I. Brown, M.D. C.M., William B. Brownlie, M.B., Ch.B.Glas., Charles Corben, M.R.C.S., L.R.C.P.Lond., M.D.Durh., Robert Crothers, L.R.C.P. and S.E., Ruston K. Dadachanji, L.M. and S.Bombay, M.R.C.S., L.R.C.P.Lond., John K. M. Dickie. M.D.Edin., Matthew R. Drennan, M.B., Ch.B.Edin., Edwin C. East, M.R.C.S., L.R.C.P. Lond., Max Greenberg, M.B., Ch.B.Edin., Francis J. Henry, M.B., Ch.B.Glasg., D.P.H.Camb., Frederick N. H. Maidment, M.R.C.S., L.R.C.P.Lond., M.B., Ch.B.Lond., Robert Massie, L.R.C.P. and S.E., Arthur S. Roe, M.R.C.S., L.R.C.P.Lond., M.B., Ch.B.Oxfd., Robert Stout, M.R.C.S., L.R.C.P.Lond., M.D.Lond., Alfred C. Talbot., M.B., C.M., M.R.C.S., L.R.C.P.Lond., John Watson, L.RC.P. and S.E.

Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

THE quarterly examinations of the above Board, held in Edinburgh, were concluded on the 19th inst., with the following results:—

The following candidates passed the first examination:—Donald McG. Stewart, John W. Irvine, John F. Campbell, and William F. C. Radford; and seven passed in Physics, three in Biology, and two in Chemistry.

The following candidates passed the second examination:—John F. Kerr, Thomas D. Renwick, William G. Anderson, Lizzie, O'Flynn, Alexander W. McGregor, James E. Ainsley, Edward A. Neilson, Maurice A. White, and Benjamin St. A. A. Young; and five passed in Anatomy and six in Physiology.

The following candidates passed the third examination:—Stewart N. Toulmin, William D. Bathgate, Leonard O. Weinman, Percy Chisholm, Thomas E. Lawson, Douglas C. M. Page, William O'Grady, Claude T. Darwent, John Berry, Harry L. Guthrie, Edgar Annequin, and Frederick A. V. Denning; and four passed in Pathology and three passed in Materia Medica.

The following candidates having passed the final examination were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P and S.G.:—George W. Fleming, Stanley E. Jones, Harry G. Hankins, William Murphy, John M. Milne, Charles H. N. Baker, Charles C. Forsyth, Cameron V. Bailey, James B. Donaldson, Stuart MacV. Fisher, Frederick G. Gibbs, John E. L. Keys, Frederick R. Lucas, James R. Menzies, William A. Rees, Ian C. Mackenzie, Charles Cosgrove, and Roy D. Clayton; and two passed in Medicine, three in Surgery, two in Midwifery, and ten in Medical Jurisprudence.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

(a) A paper read before the Section of Surgery, Royal Academy

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Mr. P. C. P. Gerrard.—Your communication was received too late for insertion. As we go to press on Tuesday morning only letters can be attended to that reach us by first post.

Dr. O'Hara (Melbourne).—The suggested notes on leading events in the Antipodes will be thankfully received and will doubtless be read with interest in the mother country.

Tropical (Liverpool).—Our opinion of Castellani and Chalmers, to which you refer, will be found on reference to the page devoted to "Reviews of Books" in our present issue.

Dr. Dowler (Mussoorie, India) is thanked for his communication.

Dr. S. T. (Yorks).—Typhoid fever was responsible for 196 deaths in London in 1910, 181 in Paris, 584 in St. Petersburg, 73 in Berlin, 82 in Vienna, 330 in Calcutta, 558 in New York, and 195 in Buenos Ayres. The death rate per thousand was 0.05 of the population in the towns of England and Wales.

FOURTH INTERNATIONAL CONGRESS ON SCHOOL HYGIENE.

The fourth International Congress on School Hygiene, and the first to be held in America, will take place at Buffalo on August 25th-30th. The programme will consist of 250 papers and 15 symposiums, taking up hygiene from all points of view. The congress is open to all persons interested in school hygiene upon the payment of a fee of $5. Application for membership should be sent to Dr. Thomas A. Storey, College of the City of New York, New York City. President Wilson has accepted the honorary office of patron of the congress. The president of the congress is Mr. Charles W. Eliot, of Harvard University. The vice-presidents are Dr. William H. Welch, of Johns Hopkins University, and Dr. Henry P. Walcott, President of the recent International Congress on Hygiene and Demography, and Chairman of the Massachusetts State Board of Health. The President of the Organising Committee for Great Britain and Ireland is Sir Lauder Brunton, and among the vice-presidents are Lord Sheffield, Mr. C. H. Hobhouse, Lord Belper, Sir Edward Brabrook, Sir Edward Byers, Sir John Cockburn, Sir William Collins, Sir Henry Craik, Sir James Crichton-Browne, Sir George Fordham, Sir Henry Hibbert, Sir William Mather, Sir Shirley F. Murphy, Sir Robert Morant, Sir George Newman, Sir Harry Reichel, Sir John Struthers and Sir Aston Webb.

Dr. W. J. M. (Bournemouth) is thanked for his letter with enclosure.

Mr. R. Kelly (Canterbury).—According to Dr. W. H. R. Rivers, tobacco comes out from the ergographic test less creditably than other drugs, such as alcohol, cocaine and strychnine. Trainers are right, therefore, in prohibiting the use of tobacco while preparing for any feat involving severe muscular effort.

F.R.C.S.Edin. (Reading).—The various muscular phenomena met with in the early stages of phthisis were well described by Pottenger in 1909, who believed that muscular spasm results from the reflex excitation of the spinal segments by afferent stimuli from the lung through the sympathetic nervous system to the cord, thereby exciting neighbouring centres in the anterior horns, with consequent spasm.

Nil Desperandum (Herts).—The principal pharmacological action of the leaves of the *Viola odorata* is that of a laxative and mild urinary antiseptic. The active principle of the root is emetic and cathartic. The plant is certainly harmless, but as to its efficacy in cancer the evidences are that the treatment has afforded slight relief, but not cure.

Appointments.

Barber, H. W., M.B.Cantab., Medical Registrar to Guy's Hospital.

Barnes, H. Patricia, M.B., B.S.Lond., House Physician at the East Suffolk and Ipswich Hospital.

Cleminson, F. J., M.C.Camb., F.R.C.S., Assistant to the Ear and Throat Department at University College Hospital.

Davies, J. L., M.B., B.S., House Surgeon at University College Hospital.

Doran, S. S., L.D.S.R.C.S.Eng., Lecturer in Dental Surgery and Pathology in the University of Manchester.

Douglas, J. S. C., D.M.Oxon., Lecturer in Pathology in the University of Manchester.

Gardiner, H., M.B., B.S.Lond., Anæsthetist to Guy's Hospital.

Heaton, T. B., M.B.Oxon., Medical Registrar to Guy's Hospital.

McNair, A. J., M.R.C.S., L.R.C.P.Lond., Anæsthetist and Obstetric Registrar to Guy's Hospital.

Poulton, E. P., M.B.Oxon., M.R.C.P.Lond., Medical Registrar to Guy's Hospital.

Rees, F. H., M.B., B.S.Lond., House Surgeon at University College Hospital.

Saner, J. G., B.C.Cantab., Resident Surgical Officer to Guy's Hospital.

Vacancies.

Royal Victoria Eye and Ear Hospital, Dublin.—House Surgeon. Salary £40 per annum, with board and residence. Applications to the Secretary. (See advt.)

Monaghan District Lunatic Asylum.—Junior Assistant Medical Officer. Salary £100 per annum, increasing by yearly increments of £10 until it reaches £150 per annum, with furnished apartments, etc. Applications to J. P. Conlon, Resident Medical Superintendent. (See advt.)

Three Counties Asylum, near Hitchin.—Junior Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, washing, and attendance. Applications to the Medical Superintendent.

Kent County Asylum, Chartham, near Canterbury.—Junior Assistant Medical Officer. Salary £220 per annum, with furnished apartments, including lighting, heating, and attendance, also laundry, milk, and garden produce. Applications to Medical Superintendent.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to Medical Superintendent, Asylum, Maidstone.

Hereford County and City Asylum.—Assistant Medical Officer. Salary £155 per annum, all found. Applications to the Medical Superintendent, The Asylum, Burghill, Hereford.

Leicestershire and Rutland Lunatic Asylum, Narborough, near Leicester.—Junior Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, and washing. Applications to W. J. Freer, Esq., Clerk to the Committee, 10 New Street, Leicester.

Canterbury Mental Hospital, Canterbury.—Assistant Medical Officer. Salary £160 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

University of Durham College of Medicine, Newcastle-upon-Tyne. —Demonstrator of Anatomy. Salary £200 per annum. Applications to Professor Howden.

City of Birmingham.—Salterley Grange Sanatorium for Consumption, near Cheltenham.—Resident Medical Officer. Salary £300 per annum, with board, etc. Applications to Robertson, Council House, Birmingham.

Carlisle Dispensary.—Resident Medical Officer. Salary £150 per annum, with apartments (not board). Applications to the Hon. Secretary, Mr. G. A. Lightfoot, 23 Castle Street, Carlisle.

Births.

Cane.—On July 19th, at Kirkee, near Poona, India, the wife of Captain Arthur S. Cane, R.A.M.C., of a son.

Corbett.—On July 5th, at Kasauli, India, the wife of Captain D. M. Corbett, R.A.M.C., of a son.

Deane.—On July 14th, at Wragby, Lincolnshire, to Dr. and Mrs. Wm. Deane—a daughter.

Gillespie.—On July 13th, at Dunkeld, King's Road, Knock, Belfast, to Dr. J. R. and Mrs. Gillespie—a daughter.

Harris.—On July 13th, at 98 Lower Addiscombe Road, Croydon, to Dr. and Mrs. Poulett Harris—a daughter.

Hunt.—On July 18th, at 3 Goldsmid Road, Brighton, the wife of Ernest Rivaz Hunt, M.A., M.D.Cantab., of a son.

Marriages.

Cheadle—Reynolds.—On July 17th, at St. Mary Abbott's, Kensington, Bernard Arthur Cheadle, M.B., B.S.Lond., of Salisbury, Rhodesia, son of the late Rev. J. H. Cheadle, Canon of Westminster, and of Mrs. Cheadle, 11 Campden House Road, Kensington, to Edith Francis, widow of Claude Reynolds, late of Bulawayo, Rhodesia, daughter of the late John Evans, of Stamford Hill, N., and of Knightrider Street, E.C.

Psimenos—Scanes Spicer.—On July 17th, at the Church of the Hagia Sophia, St. Petersburg Place, London, W., by special licence, and with the full sacramental rite of the Holy Greek Church, and afterwards at St. George's, Hanover Square, George John, son of Mr. and Mrs. Psimenos, of Pyrgos, Ilidos, Greece, to Maud Mary Bullen (Dornie), daughter of Dr. Robert Hy. Scanes Spicer, Consulting Throat Surgeon, St. Mary's Hospital, London, W., and Mrs. Scanes Spicer, of 28 Welbeck Street, Cavendish Square, W., and Lynmead, Carlisle Road, Eastbourne.

Downer—Beebe.—On July 17th, at Christ Church, Westminster, Reginald Lionel Ernest Downer, M.D.Lond., of The Firs, Matlock, son of Mr. W. J. Downer, C.B., C.M.G., I.S.O., J.P., and Mrs. Downer, of Newlands, Woking, and Daphne Marguerite, second daughter of Mr. and Mrs. A. Hatton Beebe, of Elvaston, Woking.

Deaths.

Gotch.—On July 15th, at 12 St. Mary Abbott's Terrace, Kensington, two days after his 60th birthday, Francis Gotch, M.A., D.Sc., F.R.S., Waynflete, Professor of Physiology in the University of Oxford, son of the late Rev. Dr. Gotch, of Bristol.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, JULY 30, 1913. No. 5.

NOTES AND COMMENTS.

The Brighton Meeting of the B.M.A.

THE eighty-first annual meeting of the British Medical Association has come and gone. Brightonians have been dosed for a week with things medical, and both the inhabitants and the visitors have been treated to such a display of rhetoric and robes—not to mention rockets—as they are not likely to forget. From the purely professional standpoint, the discussions and papers read in the Sections have been full of interest. Despite the absence of any Cabinet Minister at the Section of Medical Sociology, the meetings held thereat were so numerously attended that admission could only be obtained by showing a special invitation card or the member's ticket. As it was, many distinguished laymen were present at the meetings of this Section, while at a meeting of the State Medical Service Association Mr. Bernard Shaw's grim remarks anent the practice of medicine were fully characteristic of that speaker's philosophy. Socially the gathering was a huge success, for the members were regularly surfeited with entertainments and hospitality. For these reasons the Brighton meeting will remain a memorable one in the history of the Association.

A Large Increase in the B.M.A. Subscription.

THE annual representative meeting of the British Medical Association has been fraught with weighty decisions. Not least amongst them is the resolve to raise members' subscription from twenty-five shillings to two pounds. The reasons for this step may reasonably be assumed to lie in the strain upon funds caused by the recent loss of members owing to differences over the insurance policy, and by the large amount spent in fighting the Insurance Act. It remains to be seen whether the proposed increase will meet the approval of the main body of the Association, for the matter can only be finally settled by a reference to Divisions. When the subscription was raised, some years ago, from a guinea to twenty-five shillings, a good deal of dissatisfaction was expressed in some quarters. Our own view is that it would be infinitely wiser to make a serious attempt to cut down expenditure rather than to increase income by a levy upon members. The financial affairs of the whole Association might well be the subject of careful expert investigation, especially as regards the journal. Were the latter in the hands of a private business firm, it would probably show a far larger margin of profit than it does under present management. As to the increase of subscriptions, although a few members will pay it with alacrity, it will press somewhat unfairly on some of the less prosperous members of the Association; and the project is, in any case, hardly calculated to add to the popularity of that important body.

What Does It Mean?

THOSE who have recently joined the Association have done so on the unwritten understanding that the annual subscription of twenty-five shillings would remain permanently fixed at that sum. The raising of the amount from one guinea to twenty-five shillings some years ago was strongly resented by some who had paid the smaller sum for many years past. If there be a matter that above all things should be determined by direct appeal to members, it is that of the payments they are called upon to make towards the funds of their organisation. The result of an appeal to Divisions will be awaited with a good deal of interest. If the recommendation of the Representatives be thrown out, it will prove once more emphatically that they are hopelessly out of touch with the electorate they are supposed to represent. It seems somewhat strange that such a proposal should be discussed and settled without some previous attempt to learn the views of members upon so vital a point. When the constitution of the Association is revised, as it must assuredly be at some time or other, it is to be hoped that some means of referendum to members upon important matters will be included in the reforms.

Medicine and the Public.

FROM the point of view of the man in the street the annual meeting of the B.M.A. affords a capital opportunity for obtaining free medical advice. The columns of the lay Press devote considerable space to reporting the proceedings, and any medical pronouncement that is considered by the "eminent Harley Street physician" of Fleet Street as likely to afford good copy is eagerly seized upon and "written up" for the special benefit of the public. During the dull season that is fast approaching there could hardly be found more appropriate subjects for discussion in the correspondence columns of the daily papers than those of sea-bathing, sleep, the ravages of some new disease, etc. And so the higher (medical) education of the public is advanced. What does it signify if the names of the readers of papers at the sectional meetings appear in the brief abstracts in the papers? No one raises any objection on ethical grounds to this form of self-advertisement, for if the three great addresses are reported in the lay Press, there is no reason why other equally attractive papers, though delivered before smaller audiences, should not also be mentioned, provided they are sufficiently interesting from the public point of view. It is far better that the masses should obtain crumbs of medical information from a reliable source than whole loaves of pseudo-medical twaddle delivered straight from the bakehouses of quackery and charlatanism.

The Eastbourne Excursion.

A special note may be added as to the Eastbourne excursion on Saturday last, which was one of the best organised affairs of the kind that the writer can recall after many years' experience of similar pleasure jaunts. The party was restricted to about eighty, and tickets were applied for several times over by members at Brighton. The party were received at Eastbourne by the Mayor—Mr. C. W. Bolton—and the Mayoress. A sumptuous luncheon was given at the Town Hall by the Corporation, and many leading citizens were present. In the afternoon the visitors were taken for a drive through lovely country to Beachy Head, whence they returned to the town, and at 7.30 were entertained to dinner by the members of the local Division at Devonshire Park. Among the after-dinner speakers were the Mayor, the President of the Association, Dr. W. Ainslie Hollis, and the Chairman of the Council, Dr. Macdonald. A concert followed, with fireworks in the Park, and the visitors returned late at night to Brighton by special train. The way in which all details of this charming excursion were managed reflects the greatest credit upon the kindliness and tactful experience of the local medical men and the Corporation. The Medical Secretary of the Association, Dr. Alfred Cox, was present, and Dr. Parry, of Brighton (local Honorary Secretary), was prominent throughout the day's proceedings.

Alleged "Bad Air" in an Underground "Tube" Railway.

Last week an inquest was held upon the body of a man, aged 58 years, who was found dead upon the platform of a "Tube" station. The evidence showed that deceased was in the habit of standing on the platform and allowing a number of trains to pass by before he boarded one. The interesting point is that a medical man who was called to deceased and who tried to restore him by artificial respiration, attributed death to a combination of causes, amongst which was the bad air of the tube. As this statement is of public importance, it is interesting to inquire on what grounds it was based. Witness stated in the newspaper report of the inquest himself to have felt the ill effects of the air when attending to the man at the station. He had no analysis of the air to uphold that view. Not long after the first "tube" railway was started in London, many complaints were made about the ventilation, and scientific tests showed the desirability of a better system for the circulation of air, which we believe has subsequently been adopted in all our London "tubes." On the whole, there appears to have been little ground for attributing the death of deceased to the bad quality of the underground air. As a matter of fact, moreover, the fact that deceased was in the habit of letting several trains pass unnecessarily raises a strong assumption of something seriously abnormal in the state of his brain. In dealing with an occurrence so definite and circumstantial as that of carbonic acid poisoning, it is well for a member of a learned profession to avoid advancing vague surmises, in support of which he is unable to produce a shred of proof.

Capt. R. Markham Carter, I.M.S., has been appointed by H.E. the Governor of Bombay to officiate as Professor of Pathology at the Grant Medical College, Bombay, in succession to Major E. F. G. Tucker.

LEADING ARTICLES.

THE ADDRESS IN MEDICINE AT THE BRIGHTON MEETING OF THE B.M.A.

The annual address in medicine at the meeting of the British Medical Association was last week delivered by Professor George R. Murray. The title chosen was "Some Aspects of Internal Secretion in Disease," a subject with which he was particularly able to deal. Although there was nothing strikingly new in his remarks they nevertheless formed a notable summary of the present position of one of the most important branches of modern medical research. It is probable, indeed, that we are on the verge of still greater discoveries than those which have been hitherto made, or—as the lecturer remarked—it was gradually being learnt that many diseases were due to the failure or perversion of normal chemical processes in which the ductless glands played an important part. The marvellous page of modern medicine unfolded by our discovery of the source of the functions of those particular glands was well illustrated in the course of the address. Dr. Murray described as a practical physician the peculiar forms of disease associated with such glands as the thyroid, the pituitary and the suprarenal glands, and the extent to which it was possible to relieve them by administering gland extracts derived from other sources. Referring to the effects of hyperthyroidism, he pointed out that we were still anxiously awaiting an explanation of that morbid activity, which came on sometimes rapidly, sometimes slowly, persisting it might be for a few months or continuing unabated for years. If the cause of this characteristic change in the thyroid gland were known we should be obviously in a much better position to treat the disease in a rational manner. Incidentally we may interpolate that the investigation of this important point, fraught with so much weal or woe to humanity, should be taken up by the State in the interests of the citizen. As Dr. Murray remarked, it was now fully recognised that the ductless glands had important relationships to each other, and that the secretion of one gland might either stimulate or inhibit the activity of other glands. As regards the pancreas, he stated that the gap to be bridged in order to enable us to make use of the present knowledge of the functions of the pancreas appeared to be a narrow one. If only the normal pancreatic hormones could be transferred directly without change from a healthy animal into the blood stream of a case of pancreatic diabetes, striking therapeutic results might reasonably be expected. The opinion has been cherished for some time by various investigators that the future hope in the curative treatment of diabetes lies by way of internal gland secretion. Clinical medicine, as the lecturer concluded, had already gained enormously from results obtained by experimental pathology, and we might look to the future with confidence for still further advances which would place more simple and efficient methods of treatment within our reach. The address may be commended to medical men who wish a careful and authoritative account of an important branch of medical activity.

THE ADDRESS IN SURGERY AT THE BRIGHTON MEETING OF THE B.M.A.

The friendly rivalry that exists between the pseudo-antagonistic branches of therapeutics, medicine and surgery, has long been a source of amusement to those who are unable to discern the essence of the distinction between the two great divisions of medical practice. So gradually, indeed, has surgery encroached upon the domains of pure medicine, so-called, and so subtle has been the intrusion of the surgeon's knife into regions of the human frame hitherto regarded as quite beyond its reach, that now scarcely a nook or cranny of our physical being remains unexplored by the cold steel of the twentieth-century operator. Is medicine the loser? one is tempted to ask, from this apparent curtailment of what has, up to the present, been regarded as its legitimate sphere of work. The answer is to be found in the substance of the Address in Surgery delivered at the Brighton Meeting of the British Medical Association by Sir Berkeley Moynihan, who endeavoured to show that opportunities have been abundantly afforded in recent years for demonstrating the power of surgical research to enlarge the scope and to enrich the knowledge of many of the problems of internal medicine. By a careful study of the "pathology of the living," Sir Berkeley Moynihan is of the opinion that a profound change has by degrees crept over our knowledge of almost every form of chronic abdominal disorder. *Post-mortem* statistics, valuable though they are, cannot afford anything like such important information respecting, say, the condition of the vermiform appendix during a patient's life as an exploratory operation conducted under the most modern and approved *technique*. It is not a little remarkable that conditions of the abdominal organs other than those which require immediate attention are frequently found to exist, particularly in cases where one of them is the centre of some infective or suppurative process. The older and more conservative plan of expectant treatment of abdominal diseases was often disastrous in its effects, whereas nowadays, owing to the introduction of simpler methods and more rapid operating, it is possible not only to reduce shock to an almost negligible quantity, but also to remove the source of the trouble at a much earlier date. With the increase in the number of gastric operations surgeons have found that many patients who complained of symptoms leading to the clinical diagnosis of gastric ulcer were found, when laparotomy was performed, not to be suffering from any ulceration of the stomach, neither were they relieved by gastro-enterostomy. In these cases the organ at fault has been found to be the appendix, lesions of which appear to favour the development of a gastric ulcer. The records of the Mayo clinic show that in 71 per cent. of cases of cancer of the stomach the malignant process is engrafted upon a simple one. If the appendix is to be held responsible for cases of chronic gastric and duodenal ulcer, it may, logically, be charged with favouring the production of cancer. Sir Arbuthnot Lane takes the wider view that the intestine itself is the factory where poisons are elaborated. The debt which medicine owes to surgery is well illustrated by discovery of the dependence of morbid conditions of the stomach and duodenum upon some infective focus resident in the appendix. Physicians will be less and less content in the future to acquiesce in a diagnosis of chronic dyspepsia without giving the patient the benefit of a surgical exploration, the mortality of which may now be reckoned as practically *nil*. In disorders of the pancreas it must be admitted that comparatively little was known about their pathology until surgeons investigated the subject. There is no reason why medicine, in its quest for knowledge, should hesitate to accept the gifts that surgery is able to offer, for the experimental method of investigation of disease in the living subject is acknowledged to be best, and, according to Sir Berkeley Moynihan, no experiments can claim an equal rank with those which form a part of almost all surgical procedures. Working upon these lines, it is at least reasonable to assume that a still greater advance will be made in the future by surgery in the direction of the elucidation of some of the obscure problems of medicine.

CURRENT TOPICS.

The New King's College Hospital.

The opening of the extensive new buildings of King's College at Denmark Hill, Camberwell, by the King and Queen last Saturday signalises the last stage in the transference of the old " King's " from its sequestered site near Lincoln's Inn Fields. After the reception of purses in the out-patients' waiting hall by the Queen in aid of the building fund, His Majesty declared the building open in the presence of a large assembly of guests. Among many features of special interest contained in the new buildings may be mentioned an observation ward, where doubtful cases may be watched for a time before being admitted to their proper wards. This ward contains eight beds, each in a separate glass-screened cubicle, by means of which patients suspected of being in the developmental stage of infectious diseases may be suitably observed. The heating apparatus is of the latest and most approved type, the total length of pipes employed for the purpose being twenty miles. The electric power is generated by Diesel oil engines, and there are over two miles of electric mains and sub-mains. The ice plant is equal to the manufacture of ten tons of ice per day. The staff and management of the new buildings may be congratulated upon the possession of an institution so well equipped to treat disease as the fine block now ready for the reception of patients at Denmark Hill.

Sea Bathing and Health.

At this season of the year, when our sea coast resorts are crowded with holiday makers, it was most opportune that a discussion on the subject of sea bathing should have taken place at the Section of Climatology and Balneology at the annual meeting of the British Medical Association at Brighton. The fame of that watering-place, as the President pointed out in his Address, was largely based upon the virtue of its sea bathing, which sport was greatly popularised by Dr. Russel. It is well known that people do not take cold after bathing in the sea as after fresh water bathing. The temperature of sea water is affected by its saline constituents and is more equable than that of river water, hence bathing therein can be indulged in for a longer period and with greater safety than in fresh water. One of the speakers, Dr. W. D. Johns, of Bournemouth, dwelt upon the value of sea bathing for consumptives, and consequently struck a popular note. If suitable cases were selected the risk was practically *nil*, while the benefits were very great. The restrictions are really few; only quiescent or arrested cases are chosen, and of these swimmers are encouraged to swim on the back in preference to employing the breast stroke. Non-swimmers are not encouraged to learn to swim. Immediately after the bath hot milk is taken, followed by a short walk. This latter piece of advice may be recommended for all. It is a great mistake to bathe after a heavy meal or to remain in the water if chilliness ensue. Young children should not be forced to enter the water against their will. Weakly patients had far better have a quiet brine bath under medical direction. For ordinary folk who are simply run down there is no better tonic than a dip in the briny every morning before or after breakfast.

The Prevention of Epidemic Diarrhœa among Infants.

Whether the prevalence of epidemic gastro-enteritis in infants during summer weather be due to the influence of flies, stone-fruit, bad milk, or other factors may yet remain debatable; nevertheless all are agreed that no stone should be left unturned in order to prevent the occurrence of such disease. The Local Government Board, with laudable promptitude, have recently issued a circular to sanitary authorities in England and Wales reminding them of the importance of taking all practicable measures for the prevention of epidemic diarrhœa and other infectious diseases of infants. Among other things, the Board emphasise the value of systematic visitation of the homes of infants under the direction of the Medical Officer of Health. As such visit should be made as early as possible, authorities are recommended, where they have not already done so, to adopt the Notification of Births Act. It is explained that although local authorities are not specifically empowered to appoint officers for the execution of this Act, it is their duty to appoint the officers necessary for the execution of the Public Health Act, and the Board consider that they may properly employ and pay women to give advice with the object of preventing infectious diseases of infancy, including those arising from improper feeding. Where there is insufficient work to employ the whole time of a woman in this capacity the office may be joined with that of Assistant Inspector of Nuisances, Tuberculosis Visitor, or school nurse. In considering the question of adopting the Act for districts other than county boroughs, the Board suggest that the local authorities before taking any formal proceedings should ascertain from the County Council whether they contemplate the adoption of the Act for the county or for some of the county districts with a view to conferring with the County Council with regard to a scheme for the adoption and administration of the Act. Reference is made to the excellent voluntary work done by infant consultations, health societies, and similar associations, which it is suggested the Medical Officer of Health should co-ordinate with the work of his department.

The Things We Say.

The spirit of breezy confidence of the Western Press in matters medical helps us to hear ourselves as others hear us. Our calling has a full and complete technical vocabulary comparable to that of golf, but we never knew till the *Journal of the American Medical Association* printed some extracts how unintelligibly mysterious our conversation was. The Trendelenberg position is described by the *Philadelphia Ledger:* "It consists simply of posterior operations by means of a specially contrived operating table that in cases of a particularly delicate character have been remarkably successful." Again: "The V— Pharmacy has been named as a supply station for antitoxin. The antitoxin will be used in cases of diphtheria, to prevent blindness in newly born babies, for throat cultures and in the examination of blood in typhoid and malaria cases." The *Boston Record* says: "The B. Welchi is the gas bacillus dwelling in the international track." Reports of medical meetings refer to "chronic intestinal nephritis," "hydrated mole," "perpetual eclampsia," and "an aneurism of the order A." Verily, speech was given to some people to conceal their thoughts.

The Decline in Child Mortality.

That a striking decline in infant and child mortality has taken place throughout the country is a gratifying fact gathered from a report by Dr. Arthur Newsholme recently issued by the Local Government Board. The great saving of child life which has undoubtedly been effected within the last few years is to be attributed, not merely to favourable climatic conditions, but to improved sanitary and housing conditions, more efficient municipal and domestic cleanliness, education in hygiene, increased sobriety of the population, and the widespread awakening to the national importance of child mortality. It is well known, the report states, that after a long series of years, during which no appreciable sustained improvement occurred, a great decline in infant mortality has been experienced in recent years. In seven years, 1906-12, 736,682 infants under one died in England and Wales, the average annual death-rate being 115 per 1,000 births. Had the infantile death-rate been 144 per 1,000 births, the average rate for the seven years 1899-1905, then 922,454 infants would have died in the seven years 1906-12. The improved conditions have implied a saving of 185,772 lives of infants during these seven years. Dr. Newsholme demonstrates that the rate of infant mortality in the towns of a given geographical county shows no parallelism with the proportion of the total population which is aggregated in the towns of that county, and that towns within the same county, sometimes within a few miles of each other, show widely divergent infant mortality rates. It is also shown that the size of a town has no definite relationship to excessive infant mortality. Dealing with some of the special conditions associated with high infant mortality, Dr. Newsholme lays stress on the important bearing of defective sanitation on the question. He also refers to the ignorance of mothers as to child hygiene, and as to satisfactory methods of rearing children under the adverse conditions of town life, which is, he believes, an important factor in producing excessive infant mortality in the more densely populated urban areas. Instruction in the matter of feeding, clothing, and general hygiene is badly needed; and the results obtained where the modern methods of child welfare work have been adopted show that such instruction has marked influence in improving the health of infants. Unsatisfactory storage of food is a further source of trouble, more especially in the summer months. Another important factor, it is pointed out, is the industrial employment of women, which may cause child neglect and produce increased infant mortality. As regards the relation of poverty to excessive mortality, he points out that infant mortality is low among the well-to-do, and that poverty is a direct cause where it induces malnutrition of mother or infant. Moreover, poverty is not infrequently associated with ignorance and carelessness, and with these commonly go overcrowding and uncleanliness.

Insurance Committees in Ireland.

Insurance committees in Ireland are like snakes in Iceland—there are none. The provisional committees appointed twelve months ago came to an end on July 15th, 1913, and up to the time of writing no committees have been appointed to take their place. The representatives of local authorities and the nominees of the Commissioners are to continue in office, but the societies were now for the first time to exercise their right of appointing members. As long ago as May 20th, the Commissioners issued elaborate regulations governing the method to be adopted in the election of representatives of insured persons. They were so planned that the elections should be completed, and the committees ready to take up office by July 15th. The arrangements, however, appear to have broken down, and no committees have as yet been appointed. The chief result of this failure is that the sanatorium benefit is suspended so far as the consideration of new applications is concerned. No consumptive can at present claim this benefit to which he is by law entitled. The position—if it were not so serious—would be amusing to those who remember the blood-curdling threats held over the head of at least one insurance committee in Ireland by the Commissioners, if the committee should fail to carry out in every particular the mandates of the Commissioners. For the past three weeks, owing to the failure of the Commissioners to make effective arrangements for the appointment of new committees, the sanatorium benefit has been at a standstill.

The Cultivation of Medicinal Plants.

It has long been known that crude drugs are subject to considerable variations in activity as regards their active ingredients. Were it possible to establish "physic gardens," such as those at Chelsea, in places where the specimens grown would be under skilled supervision, the results of such "farming" would prove interesting alike to the prescriber and to the pharmacist. The science of the cultivation of medicinal plants may be said to have received an impetus from the garden known as the "Materia Medica Farm," which has been established for some years past upon a site close to the "Wellcome" Chemical Works at Dartford. Such plants as digitalis, which is an exceedingly important crop, are grown here under conditions which, it is claimed, ensure that such slight variations in character as occur in the leaves used in the preparation of the concentrated tincture of digitalis have been reduced to what is necessarily due to the variations of season from year to year. Errors due to the inclusion of faulty or untrue specimens, frequently to be found in the collections made by both amateur and professional herb gatherers among the wild plants, are here completely eliminated. In connection with belladonna, an extended series of experiments has been carried out, such as treating it with different manures and shading it during growth with coloured fabrics. And so in like manner are many other herbs tested and experimented with over considerable tracts of land. A number of plots are used for purely experimental crops as distinct from the staples. One may find the meadow saffron growing there, close by French roses, lavender, and peppermint, together with senega and ginseng, whose root plays so important a part in Chinese medicine. The farm affords all sorts of conditions, from shady to sunny, as may be required for the different plants, so that only the best drugs are obtainable from such a source.

PERSONAL.

H.H. the King has been graciously pleased to approve of the Polar Medal with clasp, inscribed "Antarctic, 1910-1913," being granted to the following members of the medical profession who served in the British Antarctic Expedition, 1910-1913:—Surgeon George Murray Levick, R.N.; Surgeon Edward Leicester Atkinson, R.N.; Assistant-Paymaster Francis Randall Hugo Drake, R.N.; and Edward Adrian Wilson, M.A., M.B. (deceased) (clasp only).

Mr. Langdon Fuller Hanbury, M.R.C.S., has been appointed Medical Superintendent of the West Ham Borough Asylum, Ilford.

Dr. J. B. Tighe, M.B., B.Ch., B.A.O.Irel., has been appointed Medical Superintendent of the Gateshead Asylum, Stannington, Northumberland.

Mr. William Leonard Brandon, F.R.C.S, has been awarded the Stewart Prize of £50 by the British Medical Association for his researches into the epidemiology of beri-beri.

It has been decided to invite public subscriptions in order to endow a child's cot at the Royal South Hants and Southampton Hospital in memory of the late Dr. J. L. Thomas.

Dr. T. Shadick Higgins, Assistant Medical Officer of Health for Birmingham, has been appointed Medical Officer of Health for St. Pancras, in succession to the late Dr. Sykes.

Dr. George Pernet, M.D.Paris, M.R.C.S., L.R.C.P., has been appointed Dermatologist to the West London Hospital, and Lecturer in Dermatology to the West London Post-Graduate College.

Dr. J. A. MacDonald, LL.D., M.D., of Taunton, the Chairman of the Council of the British Medical Association, has been awarded the Gold Medal of the Association for conspicuous services rendered thereto.

At a reception given by Dr. and Mrs. Tunnicliffe last week, a gold watch and chain was presented to Dr. Linnell, Medical Superintendent of the Mount Vernon Hospital, by the staff, chaplains, residents, nursing staff, and household of the hospital.

Dr. H. R. Renwood, M.B., D.P.H., F.R.S.E., has been appointed Professor, and Dr. J. Sherwood New, M.B., B.S., D.P.H., Assistant and Lecturer, in the Department of Hygiene and Sanitation at the new University of London School of Architecture at University College.

CLINICAL LECTURE
ON
PUERPERAL ECLAMPSIA AND ITS TREATMENT.

By Prof. J. VEIT, M.D.

[Specially Reported for this Journal.]

The poison of eclampsia comes from the albumen of the periphery of the placenta.

This will shortly be the view that is generally accepted. One of the methods by which I would wish to bring about its acceptance was the attempt to secure the diagnosis of pregnancy by examination of the blood of the pregnant woman. In every human pregnancy the villi dip into the blood of the intravillous interspaces. If the poison of eclampsia therefore comes from the periphery of the villi and reaches the maternal blood in the intervillous spaces, then in every pregnancy something must reach the blood from the villi and this something must set up changes that bear some relation to the eclamptic poison.

During the last ten years especially a great deal of diligence and sharp-sightedness have been employed in the examination of the blood of pregnant women, and a consideration of the genesis of eclampsia has always played a part in these investigations. We already spoke of the toxicoses of pregnancy and the like. Then came the serodiagnosis of pregnancy; not as I at first thought on the basis of Ehrlich's antibodies or precipitines, but through the optical method of Abderhalden, and this insight into the physiology of pregnancy was materially enlarged by his chemical reactions.

But this proof is not associated with the dipping of the villi into the blood. In animals in which the villi are only connected with the uterus by the glands, the serum diagnosis is also in agreement. In spite of this we gain a great deal in the understanding of eclampsia, for eclamptic convulsions in labour only occur in the human female, and besides the human subject the villi are not met with in comparative anatomy except in the hedgehog and the tarsus spectrum as dipping into the maternal blood, so that the assumption of the origination of eclampsia from the albumen of the villi still stands; it even gains power, as only this dipping into the blood can explain the fact that without any trauma a very strong exacerbation follows so strong that all the protective powers of the body are powerless against it.

Such theoretical conclusions are made use of as the foundation of our treatment of the disease. As eclampsia is an intoxication there must be a counter poison, an antidote. At present we are not enough acquainted with it to already have a sufficiency of observations on the subject.

But until we do know it, cases of eclampsia must still be treated successfully. Whoever works on this subject in addition to practical measures seeks to find out a theoretical basis for his proposals, and as there is no great certainty as to where the poison is to be located, many of the therapeutical measures are directed against one symptom only, which epicritically may be considered rather a consequence and not an essential part of the intoxication. So therefore many of the measures of treatment proposed do not meet with much acceptance, as they are based on a false theory as to ætiology, or are directed against a morbid change which is only a consequence, and not itself an essential part of the disease.

But the circumstance that such measures are proposed on an uncertain basis shows the difficulty we lie under as regards treatment. If no results had followed amputation of the breast or trephining, such proposals would never have been made known, and if good results were seen, or supposed to be seen, it was only because the prognosis in eclampsia was so difficult to determine. Many cases recover, and when we believe that they recover through the treatment, we must believe that they recovered through the particular treatment made use of in the particular case.

The curative measures now generally employed in eclampsia are to find their justification on both theoretical and practical grounds. Theoretically the removal of the source of the poison, viz., the placenta, rapid delivery, the chief effect of the poison, the convulsions, therefore their removal by narcosis, "unpoisoning" of the blood by partial removal of it, venesection with or without saline infusions.

Statistics should afford the practical demonstration. Of these three methods which to-day are worthy of recommendation, that which stands on the best foundation is rapid delivery; as the poison is furnished by the placenta, complete clearing out of the uterus is the first step. Only something that was in the body before can now do harm, and it must be removed.

In recent times Halbertsma has expressed the opinion that the patients must be delivered as speedily as possible, as with the termination of the pregnancy the convulsions also cease. But abdominal Cæsarean section was at that time more dangerous than it is now, and the result was that only a few followed the recommendation. The great majority of men declined abdominal Cæsarean section for that reason, and the result was not very different when Dührsenn proposed vaginal Cæsarean section for eclampsia. Incision of the vagina and cutting through of both anterior and posterior walls of the uterus without regard to opening of the peritoneum did not commend itself to the mind of the obstetrician. The means seemed more dangerous than the disease, and for this reason rapid delivery in eclampsia found but few friends at first. It was only when Bumm, limiting himself to what was most needful, converted the operation into hysterotomia anterior that the position of affairs changed at a stroke. The result seemed to justify commendation, and thus anterior hysterotomy has found friends as a method of treatment for puerperal eclampsia. To-day it is the most widely practised method of rapid delivery. Regardless of any preliminary dilatation of the soft parts, the uterus is at once dilated sufficiently to admit the hand, for turning or application of the forceps to the fœtal head.

Operative treatment by vaginal rapid delivery has no mortality in itself. We may take it as certain that the obstetrician who understands the method and is master of the *technique* will lose no patient by hysterotomy, so long as he has efficient assistance and asepsis is complete. The first requisite is the skill learned from experience. If individual clinics publish all their cases, and therefore report some fatalities, it is explainable by want of dexterity of some of the younger men. They fail to avoid all the errors of *technique*. Amongst these I count incision or tears of the peritoneum or the larger branches of the uterine artery, further, tearing of the wound, and injury to the bladder. All this may be easily avoided.

Anyone who cannot do all this will meet with a misfortune, but the fault will lie not with the operation itself, but with the operator. Naturally it is much to be desired that every obstetrician shall be well enough trained to avoid such injuries, or a more simple method of treatment must be thought out. This objection may be raised against all operations, rapid delivery included, and indeed the art of self criticism is not possessed by every obstetrician. He believes that because brilliant results follow rapid delivery, every obstetrician is at once master of the operation. That is a serious error.

The second requisite is efficient assistance. The experienced obstetrician requires as actual aid only the skilled sister or midwife. The hands that hold the hook forceps and the speculum only need to be covered with a clean glove, and to hold them quietly. These conditions are naturally met by all physicians but not by all midwives. In this way it is explainable why so many different views prevail regarding the technical difficulties of anterior hysterotomy, One will prefer to take his case into the clinic, another will be satisfied to operate in any hovel. I believe that for the majority of cases and in considering the average skilfulness of the assistants removal of the patient to a clinic is to be preferred.

The maintenance of antisepsis goes without saying. When it is really earnestly striven for it will be maintained in spite of difficulties. If all these requisites for success in rapid delivery have been filled, then the individuality comes into play as regards the extraordinary differences in gravity in different cases.

The longer the case has been without treatment, so much the worse will be the prognosis. There are, moreover, cases that from the first can be characterised as difficult. Severe nephritis of which eclampsia is the final stage, intensive destruction of the colouring matter of the blood, a very serious condition of the heart. It is extraordinarily difficult to recognise the bad cases as such immediately. Hæmoglobinuria even is not always fatal.

Therein lies the difficulty of a correct estimation of the value of our methods. Formerly every operation was dangerous. Naturally, with a lessening of the danger of operation, eclampsia is treated more easily. Then it became a near thought to plan out a mode of treatment that was entirely free from danger. Here the use of narcotics came in. G. v. Veit laid the theoretical foundation for their employment. His opinion was that the danger lay only in the attack. Keep off the attacks and the woman was saved. His successes with large doses of morphine were excellent. But he had to make the experience that other clinics that made use of the method found no good in it. One could understand this when large doses of morphine are dangerous in themselves. Quite recently, again, Stroganoff has warmly commended the employment of narcotics. He avoids large doses of morphine; he rather combines it with chloral or makes use of the two in turns as well as cuts short the attacks by chloroform. This method has met with favourers, but there are theoretical objections to it. As it was tried only recently in the Berlin clinics, eight women died out of the first eighteen treated in that way! Naturally, after that one would have to think twice before adopting such a method.

The active methods of treatment were now widely adopted when more recently still W. Zweifel and Lichtenstein added the recommendation of venesection to the narcotic treatment of Stroganoff. As regarded the theoretical basis for this Zweifel rightly pointed out that the blood of an eclamptic patient was poorer in water than that of the normal individual. But the results as recorded by Lichtenstein are very interesting. In treating 80 eclamptic cases, he lost only five. Of the last 60 of these he did not lose a single case. Statistics like these naturally set us thinking. But here even there is something to be considered; only five died out of 80, out of the last 60 not one; therefore out of the first 20, five died, which is a high mortality as regards the first 20.

For this reason I would recommend caution in dealing with statistics. For practical purposes, a comparison must now be made between rapid delivery and the method just considered My material is much smaller than that of the Leipsic clinic. From April 1st, 1904, to February 14th, 1906, I have seen 21 cases of anterior hysterotomy recover in succession. Kapp, amongst others, has reported from Rosthorn's clinic that with the active treatment he lost only one out of 22 cases. We can really do good, then, with rapid delivery. If bad cases come into the clinic, however, we do not do so well. In 1912, I saw 18 cases of eclampsia, of which five died; two of them were in a desperate condition when they were admitted; two further died on the eleventh day after delivery, one of these had remained the whole of the time free from convulsions but unconscious, and the other died from her own severe chronic nephritis in which the eclampsia was only an episode. The fifth patient, who died on the second day, had been seriously ill before this. At the commencement of the year 1906, I was already convinced of the constantly favourable effect of rapid delivery. I almost believed that no death would take place if the patient could have attention in time. Then a fatal case occurred, then a long series of recoveries, then the deaths of the year 1902. In spite of this, however, I consider this rapid delivery to be the correct form of treatment. My conclusion is, however, that in eclampsia there are milder and worse forms. If infection and pneumonia are avoided and the cases are seen early, we can now pull through a series of cases one after another until at last some unlucky ones crop up.

Those cases are the most favourable in which it is possible to deliver the patient immediately after the first convulsion. It seems, therefore, very desirable that in Par. 454 of the new Prussian Handbook of Midwifery for Midwives, an "urgent telephone message" should be substituted for a summons to the physician by letter or messenger. Par. 312, in which this is in general allowed, should be specially borne in mind in cases of eclampsia. Moreover, it is desirable that every examination of an eclamptic woman should be undertaken under a narcotic, but an examination is not generally necessary. When the diagnosis of eclampsia is once clear the patient can be operated on straight away; the condition of the cervix uteri is no longer of any account.

In his recommendation of narcotics, Zweifel lays special stress on any operative delivery being as "sparing" as possible. I have therefore put the question to myself as to whether anterior hysterotomy can be looked on as a "sparing" operation, or whether there may be any fear that pain will remain after the operation that may set up further convulsions. I have operated in a similar way in cases of placenta prævia, in multiparous cases without narcosis, and the patients have never complained of pain. I have performed the same operation in other women under narcosis, and have inquired about any pain as soon as they have come out of the anæsthetic, and have always been assured that they felt no pain. I am not in a position, therefore, to draw any distinction between delivery by anterior hysterotomy with contracted os and delivery by forceps with the os dilated. It is perhaps a proper conclusion that rapid delivery should also include venesection and narcosis, that both methods are good, and that they should be combined. If a case of eclampsia is brought into hospital, the patient should be delivered at once, and if she has lost but little blood during delivery let 500 gm. be taken by venesection. If the patient comes out of the anæsthetic let her have a dose of morphine, and if still restless let her (following the proposal of Stroganoff) have then a following dose of chloralhydrate, and later on another dose of morphine, if necessary, and so on. Or, in the other way we can begin with venesection, and deliver at once if another attack comes on.

I see nothing wrong in combining the two methods of treatment. I shall, as hitherto, deliver at once, and if the fits continue, then try to help further by bleeding and narcotics. That venesection and narcotics are useful in eclampsia is shown by the publications of the Leipsic clinic.

As contrasted with these two methods of treatment, all others so far fall into the background. It is true that certain cases will require special measures. In case of anuria, for instance, which, although rare is occasionally seen in eclampsia, the thought of stripping or incising the kidney will present itself. This procedure will never, however, become routine treatment in eclampsia.

Which of the two methods will be the one mostly chosen will depend on the obstetrician himself. Apparently a good deal of benefit will be found in the combination of the two forms of treatment described. This, however, I would say, is only a preliminary judgment. We have the certain prospect of being able to prepare an antidote for the poison of eclampsia, and we will hope that the discovery of it does not lie too far off. Until then, we have good methods of treatment in rapid delivery, in venesection combined with narcotics, or perhaps in a combination of the whole of the three methods.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Sheffield Neave, B.A.Oxon., M.R.C.P.Lond., Physician to the Queen's Hospital for Children. Subject: "Diagnosis in Respect of Certain Symptoms and Signs in Children."*

ORIGINAL PAPERS.

APEX-TREATMENT FOR PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.Cantab., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

(*Continued from page* 90.)

II.

THE APEX IN ÆTIOLOGY AND IN TREATMENT.

A mechanical factor often determines the localisation of the tubercular mischief. In the instance of an injury to a joint, the local disablement of the lymphatic circulation which favours the settlement and the culture of the bacillus would be aggravated by any over use of the damaged joint. The joint has to be rested, in spite of the fact that it had owed its previous protection to its normal activity. Local rest which is essential for the "healing" inflammation, if we may use that term, is less essential for the "infective" inflammation. It is less efficient for the local tuberculosis cure than for the purpose of preventing the dissemination of the bacillus, and of encouraging its self-limiting tendency. Hence *the rest-cure* for local tuberculosis.

In the lung, the most plausible and generally accepted explanation for the *apex liability* which is peculiar to man, is the mechanical explanation based upon his upright station and its anatomical and physiological results at the apex in the shape of less active movement, aëration, and circulation, and of a greater proneness to an imperfect expansion, apt to narrow the circulatory channels which absolute atelectasis completely closes. The phthinoid apex, according to that view, is more predisposed, not owing to greater selective tissue-affinity for the bacillus, but owing to a higher degree of that primary "mechanical" disadvantage. Its special liability is further increased secondarily, at the pretubercular stage, by the general debility which reduces the respiratory activity most definitely at the apex. Hence two prophylactic indications: (1) the mobilisation of the apex, which was contemplated by Freund in his upper costal chondrotomy; and (2) our preventive respiratory hygiene, which aims at expanding the apex by a general expansion of the lung; and also at improving the general and the cardiac energy, for the sake of raising the tissue-resistance in general, and therefore also that of the apex. In their purpose and in their mechanism both methods are mechanical. In both of them the apex-prevention cure is the reverse of the rest-cure; it is an activity-cure. There is, however, this difference between them: Freund's treatment is a direct local apex-treatment, and the other is not.

As regards mere prevention, as Freund's operation is not in vogue, the answer to our first question is in the negative: there is no local apex-treatment at present in use. Prevention still relies entirely upon "general" pulmonary expansion for the purpose of mechanical apex culture and apex improvement; and upon the great "vital" cardio-pulmonary cure of activity as a protection for the apex against local tuberculosis.

In treatment the rest-cure has hitherto obtained, for bacillary considerations, greater attention than the indispensable vital-cure. Nay, in the days of the protracted *liege-kur*, it received an almost exclusive attention. That one-sided cure was too thorough; and at the same time incomplete in the most essential direction. Its sole object was to rest the lesion, which is limited at first to a fraction of one apex. For that object it had to rest not only both lungs and the heart, but the entire body. This implied, not only neglecting the help of the vital cure, but actually depressing, by that systematic universal over-rest, the patient's original vitality. This is a sufficiently clear negative to the question whether any local apex-treatment then existed. No attempt had been made in that direction; and we are not aware that any such attempt has been made since. Under the influence from Nordrach, where Walther stakes most upon the vital cure, Davos ultimately gave up that unphysiological exclusiveness; and it has now adopted the opposite policy, which it is to Paterson's credit to have systematised into the "graduated labour cure." By so much our treatment is far less incomplete than it was, since the indispensable mechanical factor has now been added to it at the finish. But it still remains incomplete at the beginning, when a form of treatment which is effectual even after a prolonged ordeal of disease, ought to be much more effectual then than at any other time. No suggestion has been made to apply that great principle at the start, for the same reason which still delays the earliest administration of tuberculin; simply for fear of the local lesion. Meanwhile the diseased apex does not yet possess any separate treatment of its own. To that extent we are still open to the reproach of inconsistency which attached to the *liege-kur* of old. Our treatment does not differentiate between the diseased tissues and the healthy. Identical measures have to be meted out to both of them alike.

THE HISTORY AND ORIGIN OF THE LEUCOCYTE (WHITE BLOOD CORPUSCLE).

By H. D. McCULLOCH, M.B.Glasg.

Formerly Chief Medical Officer, Hyderabad State Railway Hospitals.

In an interesting contribution to *Science Progress* upon a cytological subject by Dr. Charles Walker, he says (1):—"Except during division (*i.e.*, mitosis) an exchange of substance takes place between nucleus and cytoplasm through the extrusion of the nucleoli. When the cell is in a vegetative condition the nucleoli multiply continually and are extruded from the nucleus. The nuclear membrane is pushed out in front of the migrating nucleolus and closes up behind it as it passes. The staining reaction of the nucleolus changes directly it reaches the cytoplasm." To this he adds the further important statement: "that the differentiation into nucleus and cytoplasm is a definite separation of different functions of the cell into different areas, just as the function of the liver and kidneys are a localisation of certain functions in different areas of the body and different groups of cells. Both are the outcome of more primitive conditions."

It seems to me that the application of these observations to physiological processes in the animal body would be calculated to shed some light upon those processes that are at present little understood. Mainly in connection with leucogenesis and the history of the leucocyte. To me these nucleoli appear to be the precursors of the leucocyte and therefore of the blood cells, so-called. They certainly perform diapedesis by emerging from the nucleus, and they take up stations for chemical elaborative purposes, both endogenous and exogenous.

In other words, they become the cell-organs such, for example, as are termed the plastids, plasmosomes, or bioblasts of Altmann. Some of them may reach the periphery of the cytoplasm, and there under the cell wall fuse together, to form the cell-skin or plasmahaut (2). In attempting to trace the history and origin of the lymphoid and lymphatic systems of glands in man, I have long been under the impression that the cell-plastids must be the precursors of the lymphatic glands, and the cell-skin the precursor of the solitary or lymphoid glands. (*a*) Indeed, on reflection there seems to be the very closest anatomical and physiological analogy. The cell is a "closed corporation," so is the animal body. This fact is emphasised by Adami, in discussing exogenous and endogenous toxins. (3)

The human body is more obviously a closed corporation like the cell, just before the blastomere stage of the impregnated ovum. It continues in this closed state throughout the morula stage, when it begins to lose that appearance, till it seems to have entirely disappeared in the developed embryo and in adult man. Yet, I contend that it is still there—I refer to the "closed corporation," if it be looked for, as Adami has looked into it.

Now these nucleoli described by Dr. Walker cannot be said to be mesodermic in origin, by any kind of argument, for there is no mesoderm in unicellular organisms, and there is no mesoderm up to the morula stage of the human embryo. But there are many cells in the morula, particularly at the vegetative pole, and they are all nucleated cells. Such as are capable at a certain stage, when not dividing, *i.e.*, in the intervals of mitosis, of extruding their nucleoli into the cytoplasm of their respective cells, and these may migrate into the internal media thereby establishing "centres of activity" in definite areas, for the organs that are to be. This would be previous to the establishment of the mesoderm. It certainly is to this stage that, according to Beard, the true origin of the sex cells is to be ascribed (4).

It is conceivable that those migrating nucleoli may be performing similar though more complex functions than in the cytoplasm of the primitive cell. That is to say, that a definite separation of definite functions of the morula into different areas is taking place, in anticipation of the further evolutionary changes that are to follow. Those nucleoli are the precursors of the human leucocytes.

The functions of some are concentrated at that pole, from which the synctial cells are protruded, for the attachment of the embryo to the uterine wall. They are said to achieve this by what has been termed their phagocytic action. (5) The lymphoid and lymphatic analgens are not merely

---

(*a*) The large prickle cells of the cutis constitute the lymphoid glands of the outer surface of the body. McCulloch, *Lancet*, June 28th, 1913.

already there, as the cell-skin and the plastids respectively are in the cell that has been alluded to, but those primitive organ's are symmetrically disposed peripherally, and in a perfect fashion. They begin to lose this symmetry by the first invagination, by which some are displaced, to meet the changing form of the individual. The laying of the "keel-plate" is now synchronous with the development of the mesoderm.

This formation is associated with the development, in air breathing forms, of a *secondary* system of tubular vessels, known as the arteriovenous system. It only came to be needed when a further modification of the non-oxygen carrying and CO_2 converting leucocyte called for modification, and confinement to tubules. So it was that the "migrating" properties of those primitive cells had to be restricted, and another kind of factory established for their production. This had to be so arranged that these more inert cells could be delivered *directly* into those tubules, like coins are at the Mint, where they had to depend for their transportation on other intratubular forces. But the primitive leucocytes and their original factories continued to function outside these tubular channels as of old.

They are known to be avid of oxygen; this is provided for them. They are equally averse to CO_2. They have therefore been free to enter or leave that swiftly circulating fluid, in which some get carried away. It is claimed that leucocytes are as much blood cells as are the red cells. With this view I disagree most emphatically.

To begin with, we see in the large ovoid nucleated red blood cell of the reptilia, an important and edifying stage in the modification I have alluded to. That of the frog, for example, has not been quite deprived of its amœbic properties, nor of its nucleus. I have seen that it is capable of transforming its shape to that of a sphere by constricting and withdrawing its cytoplasm into the linin mesh of the nucleus. It does so in order to pass through the minute capillaries of the lungs, just previous to the gaseous interchanges there.

Moreover, I have successfully demonstrated the fact that no leucocytes whatever gain entrance into the pulmonary capillaries of the frog, before the Physiological Society at its meeting in this city on June 7th last (6). This micro-kinema film demonstration was most conclusive. Indeed, it should be quite clear, that the frog's red cells could not otherwise come into proper function for the purpose that they are undeniably intended. It was then claimed, that if this is so in the case of batrachians, how much more must it be so in mammals, which are exclusively air-breathers, and whose red cells are more completely deprived of amœbic properties and with no nucleus, or one that is so complex that it is not stainable.

The few criticisms that were offered on that occasion rather served to strengthen my views than to weaken them.

I therefore hold that leucocytes are in no sense of the term blood-cells, and that the expression "white blood-cells" is a misleading anomaly, and I invite honest criticism on these views.

As to the further developmental changes and function of the lymphoid and lymphatic systems, I would defer consideration to another article.

References.

(1) Chas. Walker, D.Sc. "Science Progress," April 28th, 1913, p. 643.
(2) E. H. Starling, F.R.S. "The Fluids of the Body," p. 27.
(3) G. Adami. "Genl. Pathol," p. 300.
(4) A. Keith. "Human Embryology," 1913, p. 18
(5) Gaskell. "Origin of the Vertebrates."
(6) H. D. McCulloch. "Erythrocytic Function and the Sorting Valve Mechanism of the Arterioles." Prelim. note, illust., being a paper read before the Physiological Soc. at the Univ. of London., June, 1913.

SOME ASPECTS OF INTERNAL SECRETION IN DISEASE. (a)

By GEORGE R. MURRAY, M.A., M.D., D.C.L., F.R.C.P.,

Professor of Systematic Medicine in the Victoria University of Manchester; Physician to the Manchester Royal Infirmary.

During the last five and twenty years more and more interest has been taken in the functions and diseases of the ductless glands as their importance has gradually been recognised. Previous to this period, although the structure of these bodies had been described, very little was known as to their functions. Thanks to the efforts of a large number of workers our knowledge of these organs has been largely increased, and the results of their labours have now been brought within the reach of all in the valuable works recently published by Biedl, by Swale Vincent, and by Falta. The great importance of bio-chemistry in pathology is now being more fully recognised, and we are gradually learning that many diseases are due to the failure or perversion of normal chemical processes in which the ductless glands play an important part.

The function of a ductless gland may be affected by disease in different ways. Progressive atrophy gradually diminishes and finally cuts off the supply of its particular secretion, while some special forms of hypertrophy are accompanied by an increase in the amount of secretion which may or may not be normal in composition. We have thus in the case of each gland to consider the results of changes in both the quantity and the quality of its secretion.

The most important ductless glands are the thyroid, parathyroid, pituitary, and suprarenal glands. Other glands, such as the pancreas, the generative glands, and possibly others, supply both an external and an internal secretion. In these glands, however, we find that the two forms of secretion are supplied by different sets of cells, and that one set may fail while the other continues active in function. Thus in the generative glands spermatogenesis may cease while internal secretion persists.

The Thyroid Gland and Thyroidal Insufficiency.

Only 40 years ago Sir William Gull gave us the first account of myxœdema under the name of "a cretinoid state supervening in adult life in women," by which he indicated its relationship to sporadic cretinism already described by Hilton Fagge. Four years later W. M. Ord published five cases, in one of which atrophy of the thyroid gland had been found by Professor W. S. Greenfield, and gave the name of myxœdema to the disease. The experimental work of Sir Victor Horsley, together with the clinical and pathological material collected by the committee, clearly demonstrated that cretinism, myxœdema, and cachexia strumipriva are due to loss of the thyroid gland by disease or removal. The foundation of our present method of treatment had even then been laid by Schiff, who had shown that successful transplantation of a thyroid gland in the dog sufficed to prevent the development of the symptoms which usually followed its removal. This observation was confirmed by von Eiselsberg. In 1890 Sir Victor Horsley drew attention to these important experiments, and suggested that thyroid grafting should be tried as a means of arresting the progress of myxœdema. The adoption of this suggestion was followed by remarkable diminution in the symptoms.

(a) Abstract of the Address in Medicine delivered at the 81st Annual Meeting of the British Medical Association, held at Brighton, July, 1913

It may be mentioned that the first case of myxœdema treated by thyroid extract is still alive and well, a condition of health being maintained by a dose of ten minims of liquid thyroid extract each weekday, or 6½ oz. in the course of the year. Less than a gallon of thyroid extract in all has therefore maintained her in health for 22 years. No variation of the dose has been found necessary.

Thyroid extract naturally finds its fullest opportunity in this supplemental treatment of the various forms of thyroidal insufficiency. Owing to its physiological property of stimulating metabolism and to the iodine it contains, the extract has also been found useful in conditions in which there is no definite evidence that the normal supply of hormones is deficient. The marked emaciation caused by excessive secretion in exophthalmic goitre indicates its employment in obesity, and in some cases good results are obtained, especially if a suitable diet is adopted at the same time. Good results have also been recorded in the treatment of rickets, rheumatoid arthritis, and nocturnal enuresis. The rapid improvement which takes place in the condition of the skin of cases of myxœdema during treatment induced Dr. Byrom Bramwell to employ the extract with conspicuous success in the treatment of psoriasis and other cutaneous diseases. Sir Malcolm Morris has recently dealt fully with the relationships of the internal secretions to dermatology, and has shown how important a part is played by the glandular extracts in the modern treatment of diseases of the skin.

Not only may disease be due to failure of glandular secretion, but it may be the result of the opposite condition of abnormal activity. The secretory activity does not necessarily depend on the size of the gland. Very great enlargement of the thyroid gland may take place in some forms of goitre without any excess of secretion passing into the blood, whereas in Graves's disease a slight increase in size may be accompanied by symptoms of active hypersecretion.

Graves's Disease.

One remarkable feature of the clinical course of Graves's disease is the variability of the symptoms, which in its most marked form is evidenced by the occurrence of crises. We see in some cases general crises of acute thyroidism—that is to say, periods during which almost all the symptoms are aggravated for the time being. The pulse is greatly increased in frequency up to 200 or more per minute; there is great nervous agitation and restlessness, increased tremor, sweating, vomiting, and diarrhœa. These attacks are alarming and dangerous, and in some cases prove fatal within a few days. The general crises are evidently due to a sudden increase in the activity of the thyroid, resulting in the discharge of a larger amount of secretion into the blood stream. Still more interesting is the occurrence of local crises during which, perhaps, a single symptom becomes greatly increased, or one organ or system alone is suddenly thrown into a state of extraordinary activity. Thus some patients are liable to cardiac crises, during which, for no apparent reason, and even when resting in bed, the pulse-rate suddenly increases from 120 to 200 or more per minute. We do not know in what manner the thyroidal hormones produce the rapid rhythm of the heart which is so constant a symptom in Graves's disease. We can produce the tachycardia in a healthy subject by giving large doses of thyroid extract, which, however, does not appear to influence the ventricular rhythm directly.

The considerable number of cases of Graves's disease in which partial or complete recovery takes place shows that the diseased gland is capable of returning to a normal state of activity, but we have still to ascertain precisely under what conditions this favourable result is obtained. General hygienic, medicinal and electrical treatment is followed by gradual improvement and recovery in many cases, but we must require some more rapid means of treatment. In favourable cases some fifteen to twenty weekly doses of the rays have been sufficient to bring about great improvement or practical recovery, but in others only slight improvement has followed a similar course of treatment. The use of a special cytotoxic serum which would induce an atrophy of the thyroid gland has not been satisfactory. Unfortunately a cytotoxic serum is not altogether selective in action, and induces changes in the cells in other organs as well as in the thyroid gland itself. Thyroidectin, though useful in some cases, is not constant in its effects. Rodagen is of doubtful utility, though the fresh milk of a thyroidless goat is useful in some cases, but it may be difficult to obtain one of these goats, and there is the trouble of maintaining the animal during the treatment. The results of surgical treatment in selected cases are satisfactory, but it is to be remembered that there are still considerable risks to be faced, and that recovery does not follow in all cases. The crises call for special treatment as they arise.

The Pituitary Body and Acromegaly.

The pituitary, like the thyroid gland, has a remarkable influence upon metabolism, and the rapid growth and development which normally take place at adolescence are largely due to its activity. Cushing's experiments show that after removal of the hypophysis in adult dogs there are deposition of fat, increased sugar tolerance, lowering of temperature, and abeyance of sexual functions. In puppies there is, in addition, arrest of sexual development and of skeletal growth. In man the effects of pituitary insufficiency are shown in the condition described by Fröhlich and named by Bartels dystrophia adiposogenitalis. There is a remarkable increase in the amount of fat associated with high carbohydrate tolerance, dryness of the skin, impaired nutrition of the hair and nails, and arrested development of the genital organs. It appears, therefore, that hormones supplied by the anterior lobe of the hypophysis activate skeletal growth and sexual development at puberty, control the accumulation of fat, and the nutrition of the skin and its appendages. Sir E. A. Schäfer has shown that the posterior lobe, including the pars intermedia, supplies hormones which regulate the tone and contractility of plain muscular tissue generally and of the heart, and stimulate the activity of the mammary gland and of the kidney. It seems possible that the secretion is polyvalent, and that these various effects are produced by the action of different hormones, as Herring obtained a pituitary hormone from the skate which stimulated the mammary gland without influencing either the circulatory system or the kidney. In addition to these important results, Sir E. A. Schäfer's experiments have placed pituitrin, a very powerful remedy, in our hands, by means of which we can stimulate plain muscular tissue to contract. It is not unreasonable to expect that it may be found possible to separate the hormones which stimulate glandular secretion from those which act upon the unstriped muscle and so further increase their range of usefulness in the treatment of disease.

Not only may disease be due to lack of pituitary hormones, but a remarkable change in the body arises when the supply of these hormones is superabundant. When this occurs in the adult the hypersecretion leads to the characteristic changes of acromegaly. In the active stage of acromegaly we can expect no benefit from the use of pituitary extract, though thyroid extract has proved to be of service in some cases. The means at our disposal at present for diminishing the over-activity of the hypophysis are the use of X-rays and surgical measures for the relief of local pressure symptoms by decompression or the removal of some of the enlarged anterior lobe of the gland, so as to diminish the supply of its secretion. Owing to the deeply-seated position of the hypophysis the actual dose of X-rays which can reach it must be small. The chief benefit obtained by surgical measures has been the relief of symptoms such as headache and improvement of vision resulting from the diminution of local pressure thus brought about, and is comparable to that obtained by the removal of a portion of a goitre which is compressing the trachea.

The Suprarenal and Generative Glands.

Failure of the suprarenal glands is the immediate cause of Addison's disease, in which there are increased pigmentation of the skin, vomiting, and great prostration, with lowered blood pressure. Though the suprarenal insufficiency is most commonly due to tuberculosis of the glands, Rolleston has shown that other destructive lesions, such as simple atrophy, produce the same result. We know little of the functions of the suprarenal cortex, but it seems not improbable that while the low blood pressure and prostration in Addison's disease are due to loss of adrenalin from destruction of the medulla, the bronzing of the skin is due to loss of the cortex. In adrenalin we possess a remedy the value of which is fully recognised as a hæmostatic and in the treatment of asthma and other conditions. Something more than this, however, is lacking in Addison's disease, as, unfortunately, neither adrenalin nor extracts of the whole suprarenal gland are able to replace the diseased gland in this malady.

It has long been known that the generative glands exercise a dual function, and that their removal not only induces sterility but other remarkable effects as well. Castration in early life prevents the development of secondary sexual characters; thus the antlers do not develop in stags which have been castrated when quite young. Spermatogenesis and internal secretion, the two functions of the testicle, can be separated experimentally, as the internal secretion is in all probability furnished separately by the interstitial cells of Leydig. While ligature of the spermatic cord produces the same result as castration, ligature of the vasa deferentia entails sterility alone. It has been shown by Shattock and Seligmann that the latter operation in sheep does not prevent the full development of secondary male characters, as the vascular supply remains intact and the normal amount of testicular hormone reaches the general circulation. Similar effects are produced by X-rays, which induce sterility without arresting internal secretion, as they spare the cells of Leydig.

There is a close relationship between the functions of the generative gland in both sexes and other ductless glands. The absence of sexual development at puberty in cretins and in cases of pituitary insufficiency clearly indicates that both the thyroid and pituitary glands normally exert a powerful influence on the development of both testicle and ovary. This relationship is still further illustrated by the remarkable development of these glands which takes place under the influence of thyroid extract in an adult cretin, who has long passed the normal age of puberty.

The results of loss of the secretion of the ovaries are seen after their removal by operation and at the normal climacterium. The symptoms which then occur are variable in character, but hot flushes, irregular perspiration, morbid fears of organic disease, and various subjective sensations are common. It is rather remarkable that so little attention is devoted to their consideration in our medical textbooks, and that their true nature is apt to be overlooked.

This brief survey of some of the results which follow any abnormal ebb and flow of the internal secretions in disease indicates how important are the functions of the ductless glands.

THE MEDICAL HISTORY OF BRIGHTON. (*a*)

By W. AINSLIE HOLLIS, M.A., M.D., F.R.C.P.,
Consulting Physician to the Royal Sussex County Hospital, Brighton.

After referring to previous Presidential addresses of an historical and archæological character delivered before the Association in 1896 and 1912, Dr. Hollis proceeded as follows:—

In the local museum two relics of the early bronze age found at Lancing may have been used in surgery. One (catalogued in a metropolitan museum which has several specimens as "spoon to extract unguents from narrow-necked bottles") is very like a guider or director, and the other a scraper, figured in the old English and Dutch editions of Ambroise Paré's work on surgery. They may have been used for operative purposes.

After the Norman Conquest "a convent of

(*a*) Abstract of Presidential Address delivered at the 81st Annual Meeting of the British Medical Association, held at Brighton, July, 1913.

mendicant friars more burthensome than ten endowed ones," was founded at Brighton on the land now occupied by the market and Town Hall. A chantry or free chapel was attached to the *convent*, which was probably only a small building. This offshoot of the Lewesian monastery, amongst other duties, saw to the due collection of the annual rent or *gablum* of the manor of Bristelmestune from the fisherfolk living there. So far as I can ascertain, surgery at this period of the world's history consisted mainly of "blooding" the patient and it is possible that the friars dwelling in the Prior's Lodge at Brighton, by resorting to this simple operation, did so far help the poor overtaxed fisherfolk when sick. In so doing the holy friars would only be following the footsteps of the νοσοκόμοι (infirmarers), of the Stadium monastery at Constantinople, and of Master Rahere and his brethren at St. Bartholomew's, London. At that time "blooding" was a fine art, and experts withdrew blood from different parts of the head, neck, body, and limbs, to combat the various symptoms for which relief was asked by the patient.

Nevertheless, surgery was in a sorry plight during these centuries of monkish rule; whilst, during the age of flint implements, "ancient skulls with clear signs on them of extensive operations, and limb bones with well-healed fractures show that there were daring and successful surgeons among the Europeans of the neolithic age." On the other hand amongst the many hundreds of skeletons found within the precincts of the Priory grounds at Lewes, Dr. Mantell says, "Several examples of unskilful surgery 'of the good old times' were pointed out to me by my friend, Mr. Warren Lee. An arm bone, which had been broken asunder transversely, and had become firmly united, was 2 ins. shorter than natural, from the fractured ends projecting over each other. A thigh bone that had been dislocated upwards had never been replaced, but was ankylosed to the pelvis and its socket obliterated; the holy brother to whom it belonged must, therefore, have suffered severely, and have halted very sadly in his walk for the remainder of his days. Of bony tumours and scrofulous caries of the bones there were several instances." Such, then, was the condition of surgery in the area of this Division of the British Medical Association during the Middle Ages.

The Belief in the Royal Touch.

After the disastrous defeat at Worcester and just before his departure for France, Charles II. slept for one night at an inn in Brighton. According to Richard Wiseman, his Sergeant-Surgeon, this monarch possessed in an eminent degree "the admirable faculty of curing the struma" by the touch. To quote Wiseman's own words, "I myself have been a frequent eye witness of many hundreds of cures performed by his Majesty's Touch alone; without any assistance of chirurgery; and those many of them, such as had tired out the endeavours of able chirurgeons before they came thither."

It is difficult to understand how such an eminent surgeon could uphold the current superstitions concerning the Royal Touch in the way he has here done. Wiseman, I need hardly remind you, introduced into England the tying of arteries, and he advocated the excision of diseased glands whenever possible, "taking care meanwhile not to divide the cystis, so that matter flow out."

The "Discovery" of Brighton.

About the year 1750 Dr. Richard Russel, Physician to St. Thomas's Hospital, published in Latin his *Dissertatio de Tabe Glandulari et de usu Aquae Marinae in Morbis Glandularum.* A year or so afterwards—the exact date is doubtful—he "discovered Brighton." He resided there annually during the season until his death in 1759. His essay on sea water is somewhat discursive. The cases selected for publication as among those benefited by the external or the internal administration of sea water included patients suffering from struma, constipation, renal calculus, "scirrhus," and other diseases. His contemporary, Dr. Speed, in a *Commentary on Sea Water*, wrote: "I think we ought to attribute the Alleviation to the prudent Use of other select Medicines which this Author [Dr. Russel] employed rather than to the drinking of Sea Water." Be this as it may, Dr. Russel, who was very popular, especially among the ladies, undoubtedly attracted many fashionable folk to the town by his advocacy of sea bathing and sea water. His widowed daughter, Hannah, married William Pepys, a collateral descendant of Samuel, the diarist. About ten years after the death of Russel, Dr. Awsiter tried to revive the flagging interest of the public in the relief of disorders by the use of sea water as a remedy. In a pamphlet (published in 1768) he strongly advocates sea-bathing. "We should use exercise after bathing, and those who cannot should have their limbs well rubbed, and their bodies warmly but not hotly cloathed to renew a proper degree of perspiration." The baths lately erected (1759), after the plans of Mr. Golden, architect, near the Steyne, were also highly commended by Awsiter. "On one side of a spacious vestibule are six cold baths, on the other side are hot baths, sweating baths, and showering baths; the baths are supplied from the sea by means of an engine."

Rabies and Hydrophobia.

Awsiter recommended the use of sea-salt as a remedy for hydrophobia, and mentioned with approval Russel's suggestion that in such case the salt should be dissolved in urine, "whereby the power of the salt in destroying the acrimony and poisonous quality of sores and wounds is invigorated."

Rabies was seemingly endemic in this part of England during the latter half of the eighteenth century. The disease was, according to the papers, by no means confined to dogs. Other domestic animals were occasionally affected. Both kine and swine often went mad, when bitten by a mad dog.

As regards human beings, although from time to time both children and adults were stated to have been bitten, there are few recorded cases of hydrophobia in the columns of the local journal.

Several outbreaks of small-pox occurred in this part of Sussex during the latter half of the eighteenth century. Inoculation was strongly advocated as a protection against the disease by the local doctors, and the operation appears to have been generally accepted by the people as a necessary, if regrettable, evil. At a vestry meeting at Brighton in 1780, again in 1786, and in January, 1794, at Rye, Eastbourne, and at Brighton (after some opposition) general inoculations were decided on. At Brighton, with a population of 5,669, 2,113 were inoculated, "out of whom only 50 died"!

Recent Times.

During the first quarter of the nineteenth century dispensaries, sea-bathing infirmaries, and hospitals were founded and opened for the relief of the sick poor in Brighton and other Sussex towns. Special institutions were also established for the treatment of special disorders, until the Sussex yokel had no need to envy the tillers of old Egypt's fertile soil in that regard.

In 1851 (August 14th) the Provincial Medical and Surgical Association held its annual meeting at Brighton under the Presidency of Dr. William King, late Fellow of Peterhouse, Cambridge, and Senior Physician to the Sussex County Hospital. His address, which was somewhat discursive, treated, amongst other matters, of the therapeutic value of artificial mineral waters prepared by a new recipe which he disclosed.

The Provincial Medical and Surgical Association on October 17th, 1874, was transformed into the British Medical Association in a memorandum of association signed by fourteen original members.

Thomas Addison, the discoverer of the disease of the suprarenal capsules which bears his name, retired here in broken health after an active life in the metropolis, and died at Brighton in 1860.

William Withers Moore, D.C.L., M.D., F.R.C.P., who was President of this Association on the occasion of its last visit to Brighton in 1886, was born at Doncaster in 1823, and was the third son of John Moore, surgeon. Moore was educated at Doncaster and at University College, London. He took the M.D.Edin. He practised both in Doncaster and in Brighton. At the time of his death, which took place from angina in 1894, he was consulting physician to the Sussex County Hospital. Dr. Moore selected as the subject of his Presidential address, "The higher education of women." His opinion may be gathered from the following extract:—

"I think that it is *not* for the good of the human race . . . that women should be freed from the restraints which law and custom have imposed upon them, and should receive an education intended to prepare them for the exercise of brain power in competition with men."

I should this evening be sorry to endorse these words as the considered policy of the President of this Association. As regards the great sex question, public opinion has changed during the last seven and twenty years; and women look upon the question from a different view-point to that they then held. The British Medical Association has always welcomed lady diplomates in medicine as honoured members of its body, and it has extended to all its members equal privileges, regardless of sex. I trust that this truly democratic spirit will always pervade its policy.

OPERATING THEATRES,

KING EDWARD MEMORIAL HOSPITAL, EALING.

Strangulated and Gangrenous Meckel's Diverticulum.—Mr. Carless operated on a girl, æt. 23, who had been admitted in an almost pulseless condition suffering from abdominal pain of three days' duration together with fæcal vomiting. The story was that three days previously she was awakened by severe abdominal pain during the night; it was probable she had indulged in an indigestible supper the previous evening. A doctor was sent for next morning as the pain persisted. A dose of castor oil was administered. The symptoms progressed during the next day or two, and she was then admitted to the hospital in a badly collapsed condition. A small dose of morphia was promptly given to relieve the pain, and an intravenous saline infusion was administered whilst the surgeon was coming from town. The result of this was very satisfactory, the patient's condition improving immensely. On examination, the abdomen was found to be distended, more on the right side than on the left, but it was not typically hard and resistant; in particular the epigastrium was soft, as also the suprapubic region. On vaginal examination, it was thought there was some fulness in Douglas's pouch. The patient's colour was good and her menses had been regular. This latter fact eliminated the question of ruptured tubal gestation; the absence of epigastric rigidity and of any previous history of indigestion excluded a diagnosis of perforated gastric ulcer. The condition of the right iliac fossa and the absence of pyrexia made one doubt that the origin of the trouble was in the appendix, and a diagnosis was suggested of internal strangulation under a band. The fact that the pain started during sleep is a very common history in such a condition, and the persistence of vomiting, finally becoming fæcal, without any characteristic rigidity or tenderness in the right iliac region, supported such an idea.

The patient was removed to the operating theatre, and after the necessary cleansing the abdomen was opened in the middle line below the umbilicus, the incision subsequently being extended upwards. As soon as the peritoneal cavity was opened a quantity of blood-stained serous fluid escaped, and the remark was made that this probably confirmed the diagnosis. Several coils of distended small intestine were allowed to escape, and it was then possible to see a tense, black swelling about the size of a small hen's egg, placed deeply in the right iliac fossa. It was held in place, and could not be drawn to the surface, but its relation to the surrounding parts was difficult to determine owing to intestinal distension. Relief of this was essential, and therefore a coil was tapped with a medium-sized trochar and cannula, and a large quantity of blood-stained fæcal material and gas was allowed to escape. This opening in the intestine was sutured, and it was now possible to determine that the black mass was a portion of the small intestine strangled by a band formed by an adhesion between the extremity of the Fallopian tube and the cæcum. A small Kobelt cyst was present at the tubal end of the adhesion. An aneurysm needle was passed under the adhesion, which was then divided at each end. This set free the gangrenous mass, which was drawn up out of the wound and found to consist of Meckel's diverticulum, together with a small portion of intestine on either side of it. Relief of the constriction made no difference to the condition of the gangrenous mass, which was offensive and surrounded by inflamed coils of intestine, including the cæcum and appendix.

By this time the patient's condition had again become exceedingly bad, and it was impossible to undertake an entero-anastomosis. Consequently the dead portion of the gut was cut away, and a large rubber tube stitched into the upper end and a Paul's tube into the lower. The coil of gut was left out and the abdominal wall closed loosely around it. Saline venous infusion was again had recourse to, a few drops of adrenalin being added to the salt solution. The patient recovered consciousness and lived for about 36 hours, but the bowel was obviously paralysed as the result of the general peritonitis, and there was no further discharge from either tube.

It was unfortunate that the patient came under observation so late, as her condition was one easily amenable to surgical treatment if taken early enough. Meckel's diverticulum is by no means an uncommon congenital abnormality and gives rise to many pathological conditions: it may constitute a band which determines obstruction; it may become adherent to some other structure and by traction on the latter cause an acute kink; it may become a place of lodgment for an intestinal or biliary calculus and give rise to a condition analogous to acute appendicitis; it may remain as a diverticulum and cause severe colic. All of these conditions have passed under Mr. Carless's notice, but this was the first occasion, so far as he remembered, in which the diverticulum itself became strangled under an adhesion. Acute strangulation of the intestine under such an adhesion is not very uncommon, and the occurrence of acute abdominal symptoms in a young person, associated with persistent vomiting becoming fæcal, together with more or less marked constipation, in the absence of typical symptoms of perforated gastric ulcer, or of acute appendicitis, or of anæmia caused by a ruptured tubal gestation, or of an ovarian cyst with twisted pedicle, should at once suggest to the surgeon the probability of a mishap of this character. It need hardly be mentioned that a most careful examination of all the hernial apertures, normal and abnormal, should be made before internal strangulation is diagnosed, for a small strangulated femoral hernia is very easily overlooked.

SPECIAL REPORTS.

THE EIGHTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT BRIGHTON, 1913.

[By Our Special Representative.]

SECOND ARTICLE.

Favoured by genial, if not sultry, weather, the general impression at the conclusion of this, the 81st annual meeting, is that it has been one of the most successful of recent years. The work in the sections has been of a high scientific order, the discussions have been well sustained, while the arrangements made for the entertainment of the members both by the town municipal authorities of Brighton and Hove, and also by the local medical profession, have been characterised by a lavish display of hospitality. The citizens of Brighton also added their welcome, so that during the busy days of the congress the most cordial relations existed between the town folk and their visitors. The magic passport of the card of membership provided free admission to the principal clubs and several local places of interest. The Hon. Local Secretary, Dr. L. A. Parry, is to be greatly congratulated upon the phenomenal success of this gathering, which it was feared at one time might be jeopardised by the proximity of the International Congress of Medicine. These fears, happily, have not been realised.

On the Tuesday afternoon at the annual general meeting, the President-elect, Sir Alexander Ogston, K.C.V.O., Consulting Surgeon to the Aberdeen Royal Infirmary, was introduced, and it was formally announced that the meeting would take place in Aberdeen in 1914.

One of the principal events in connection with the annual meting has been the presentation of the Gold Medal of Merit awarded by the Association for conspicuous services rendered to it to Dr. J. A. MacDonald, of Taunton, the Chairman of Council.

Religious Services.

According to long-established custom, the annual Church Service was held in the Parish Church of St. Peter. A large number of members, duly attired in academic costume, marched through the Municipal Gardens, headed by the Mayors and Corporations of Brighton and Hove, who attended in state, to the seats reserved for them. The lesson was read by Mr. T. Jenner Verrall, M.R.C.S., and the sermon was preached by Canon John Wakeford, M.A., B.D., Precentor of Lincoln Cathedral, who delivered a striking discourse on St. John, xix. 20: "It was written in Hebrew, Greek and Latin." In modern times there was not only that danger of specialisation in science, but of the over-emphasis of the physical in the medical profession. Health meant wholeness, completeness, and was not a local condition, but the harmony of the whole being, with the moral and the mental effective as well as the physical and the material. Our great need was to realise the unity of human nature, the harmony between body and soul, so that we dealt with both and ministered to the whole, not one division or section, of human nature. It was neglect of this truth that enabled their critics to cavil; his appeal to his hearers was to close their ranks and in the frank confidence that reigned between doctors and clergy let them insist upon it that they should see human life whole, the one helping the other.

The collection was divided equally between the Parish Church of Brighton, Epsom College, and the Royal Medical Benevolent College.

Earlier in the day there was a Roman Catholic Service at the Church of St. John the Baptist, Bristol Road, conducted by the Right Rev. Mgr. Canon Johnston, of Brighton, who preached from Acts xvii., 28. He asked his audience to realise more and more the responsibility of their high calling, and he said that it was a source of strength to him and his colleagues to see by their side, in the hospitals and homes of the sick, the devoted love and skill of the doctor. After the service of Mass, Mgr. Johnston kindly showed those present the objects of interest in the church, which included among them the tomb of Mrs. Fitzherbert, the wife of George IV.

The President's Address.

A large and distinguished audience assembled in the Dome on Tuesday evening to hear the President's address. The Mayor of Brighton (Alderman Thomas Stanford, J.P.) opened the proceedings by welcoming the members and delegates to Brighton. A replica of the Presidential badge was then presented to Dr. Hollis on behalf of the local division, and the badge was placed around the neck of Mrs. Hollis amidst tumultuous applause. Mr. T. Jenner Verrall, the Chairman of the representative meeting, on behalf of the Council, presented the Gold Medal of the Association mentioned above to Dr. J. A. MacDonald, LL.D. The Stewart prize of £50, instituted by the late Dr. Alexander Patrick Stewart, in recognition of work done in research in epidemic diseases, was awarded by the President to Mr. William Leonard Braddon, F.R.C.S., for his work in connection with beri-beri.

In choosing for his subject "The Medical History of Brighton and its Neighbourhood," Dr. Hollis delivered an address full of antiquarian and medical interest. A full abstract of the address will be found on p. 118.

The Address in Medicine.

At the Royal Pavilion a large company assembled in the Music Room to hear the Address in Medicine by Professor George R. Murray, M.A., M.D., F.R.C.P., Physician to the Manchester Royal Infirmary, who chose for his subject that of the internal secretion of the ductless glands. In spite of years of investigation by many experts the speaker confessed that the mode of action of the internal secretions was still obscure, though knowledge of their effects was gradually expanding. Generally speaking, ductless glands acted on other tissues at a distance by means of "hormones," which were conveyed by the blood stream to the cells for which they were destined. A full abstract of the address appears elsewhere in our columns (p. 116.)

The Address in Surgery.

This was delivered on the Thursday by Sir Berkeley Moynihan, M.S., F.R.C.S., Professor of Clinical Surgery in the University of Leeds, who chose for his subject "The Gifts of Surgery to Medicine." The two branches of therapeutics, medicine and surgery, were by no means antagonistic; rather they were one and indivisible. Recent years had, however, shown the power of surgical research to enlarge the scope and enrich the knowledge of many of the problems of internal medicine. By a study of what he ventured to call the "pathology of the living," a very profound change had by degrees crept over our knowledge of almost every form of chronic abdominal disorder. In surgery, as in other arts, simplicity was the supreme virtue. Sir Berkeley Moynihan referred to the hypothesis that intestinal stasis might be responsible for many other diseases which attack, not only the abdominal viscera, but also parts remote therefrom. Medicine in its quest for knowledge might rightly levy a tribute from every other science with which it comes into contact. Clinical research, when sedulously conducted and illuminated by the disclosures made upon the operating table, afforded the most accurate of all methods of investigation into the diseases by which man was attacked. We hope to publish a full abstract of this interesting address in our next issue.

The Annual Dinner.

On the Thursday night the annual dinner of the Association was held in the Town Hall, Hove. The President, Dr. Hollis, occupied the chair, and he was supported by the Mayor of Hove (Alderman Barnett Marks, J.P.), Captain G. C. Tryon, M.P., the Mayor of Brighton (Alderman C. Thomas-Stanford, J.P.), the Hon. John Gordon, M.P., the Dean of Chichester, the Vicar of Brighton, Professor Pfeiffer, Professor Grober, Sir William Leishman, Sir Jas. Barr (ex-President), Mr. T. Jenner Verrall (Chairman, Representative Meetings), Rev. Canon Wakeford, the Mayor of Lewes (Councillor Hugh Stott), Alderman Gervis, M.B., J.P. (Chairman of Brighton Division), Dr. J. A. Macdonald (Chairman of Council), Dr. G. R. Murray, Mr. Rayner (Treasurer), Professor Foerster, Dr. Dawson Williams, Dr. Robert Jones, Rev. J. B. Figgis, Dr. G. Morgan, Mr. E. B. Turner (Deputy Chairman, Representative Meetings), Mr. Thelwall Thomas, Sir Berkeley Moynihan, Rev. Mgr. Canon Johnston, Rev. W. R. Dawson, Dr. S. B. Figgis, Dr. L. A. Parry (local Hon. Secretary), Mr. Guy Elliston (Financial Secretary), Dr. A. Cox (Medical Secretary), Dr. Ryle, J.P., and Dr. Neal (Medical Secretary). The vice-chairs were occupied by Drs. Whittington, Benham, Broadbent, Hobhouse, Fothergill, Ryding Marsh and Taylor, and about 300 sat down to the excellent repast served by Messrs. Booth and Sons.

After the loyal toasts had been honoured, Dr. J. A. MacDonald proposed "The Municipalities of Brighton and Hove." Speaking on behalf of the Association, he expressed the highest appreciation of the way in which the members had been received in Brighton and Hove, remarking that on no occasion had they had a better welcome. (Applause.)

The Mayors of the two boroughs having replied, the Vicar of Brighton gave "The British Medical Association." Begun with 40 members, the B.M.A. now numbered some 26,000, and included all the leading and most distinguished men in the profession. It carried its branches into all the distant parts of the world, wherever, in fact, the British flag flew; and the fact that it voted annually a very large sum of money for scientific research and betterment of their own profession and of men who were very often working under great difficulties was the best testimony to the value of their work and the extensive influence it exerted throughout the community at large.

Perhaps they had at this Conference found it difficult to carry out the serious work of the Association in addition to attending the many social functions given in their honour; but his own experience, after attending one of their scientific sections, had been that he came away with very grave doubts as to whether he was fit to live (laughter), while the enlightenment he gained on another subject was that he ought to have spent the greater part of his existence in prison. (Laughter.)

In returning thanks, Mr. T. Jenner Verrall said that the Representative body was, by the constitution, a centre of the energies of the Association, and he happened to be for the time its presiding genius—of sorts (laughter and applause). Their good wishes were by no means inopportune, for on account of certain recent public events, joints in their armour had been somewhat strained, not seriously or permanently, but for the time being tried. It was said in a celebrated letter that the writer understood that among those who were to receive it there were divisions, and he went on to say that he partly believed it. Had the letter been written to them he need have had no demur as to the truth of the report, but he (Mr. Verrall) would ask them: Were those divisions incurable? (Cries of "No"). He said "Certainly not." If he had any doubt about that he should have no pleasure in continuing the work of the Association. It had been intimated to him that by continuing another year in office he might help in the healing of any temporary feeling of soreness—(applause)—and it was for that reason that he had accepted this further term of office. His fears might be wrong as to their estimate of his personal influence ("No, no"), and he might miscalculate his physical capacity and energy, but as things were he would rather fail than not try. Any changes in the constitution of the Association should be undertaken gradually and quietly. If their constitution was to be turned into the melting-pot, out of the fine material that would be available for use it would be as possible to construct a colossal statue of Peace as a 4.7 gun. Touching a personal note in conclusion, Mr. Verrall said that as a Sussex man, Brighton born, he could hardly tell them how much it meant to him to come back there in the position he held on this occasion (applause).

The toast of "Our Guests" was proposed by Alderman Gervis, M.B., J.P., who coupled with it the names of Professor W. Pfeiffer, of Essen, Germany, and of the Rev. W. R. Dawson, as one who had raised Brighton College to a prominent place in the public schools of this country (applause).

These having suitably replied, the health of the President was proposed by Sir James Barr in eulogistic terms, to which Dr. Hollis responded.

The Firework Display.

A unique feature of the gathering was the magnificent display of fireworks on the Thursday night, immediately following the annual dinner. Thousands of people had assembled upon the promenade to witness a sight which proved to be a veritable triumph of pyrotechnic art. Among the many fascinating figure displays was a portrait of Dr. Hollis. The display concluded with complete success with a fire portrait of the King, from a recently-taken photograph, and this was accompanied by a royal salute. Early in the evening there was worded across the lawns in brilliant lines, "Hearty Good Wishes to All"; at the close there blazed out in dazzling radiance, "Goodnight." Mr. A. O. Gardener personally supervised the arrangements for Messrs. C. T. Brock and Co. ("Crystal Palace" Fireworks, Ltd.), and to him the Entertainment Committee of the British Medical Association, which conceived the idea, and the public generally who were provided with one of the greatest attractions in the history of Brighton and Hove, are grateful.

Various Meetings.

The summer meeting of the Irish Medical Schools and Graduates' Association took the form of a luncheon held at the Hotel Metropole on the Wednesday. Dr. W. Douglas, the President, was in the chair, and a large gathering of members and guests had assembled. The toast of the "British Medical Association" was felicitously proposed by Dr. H. Macnaughton Jones, who coupled with it the name of Dr. J. A. MacDonald.

The toast was received with cheers, and in replying, Dr. MacDonald said that the Association in the future was going to do what it did in the past—its very best in the interests of the members at large (Hear, hear). The past year had been a troublous one, and the Association had been very much blamed in many quarters for not having done better. In that connection he said the fault did not lie with the Association, but with the members of the Association themselves (Hear, hear). They did remarkably well, though, in his opinion. They were opposed to the strongest power in the world, the British Government, and actually had it on its knees for ten days last December. Then doctors through misrepresentation gave way, got scared by an unscrupulous campaign in the Press and by other influences that were brought to bear. He did not altogether blame the doctors; rather he was sorry, because they made an error of judgment and would have done much better had they remained steadfast. Still, if they would only look at the Bill that was introduced and the Act at the present time they would find the British Medical Association had done very well (applause).

The toast of "The Irish Medical Schools and Graduates' Association" was proposed by Dr. G. Pernet, and the President, Dr. Douglas, responding, mentioned that he had the honour of inaugurating these luncheons some years ago, and they enabled them to bring men together who could not conveniently go up to London to their larger meetings. The success the Graduates' Association had experienced in the past would, he believed, be enlarged in the future (applause).

"Our Guests" was submitted by the Chairman, which was responded to by Mgnr. Johnston, of Brighton.

The Temperance Breakfast.

On the Thursday morning, at 8.15, a large gathering assembled in the banqueting room of the Royal Pavilion for the 43rd annual breakfast arranged by the National Temperance League. Dr. W. Ainslie Hollis presided, and an address was delivered by Mrs. Mary Scharlieb, M.D., M.S., who dwelt on the responsibilities of the medical profession with regard to temperance in child-bearing women. The evil effects of alcohol upon them fell especially upon their offspring, for immature tissues were vulnerable and specially susceptible to the action of alcohol. Dr. Arthur Newsholme, formerly M.O.H. of Brighton, proposed, and Dr. R. Murray Leslie seconded, a hearty vote of thanks to the speaker and also to the President.

Exhibitions.

Horlick's Malted Milk Company made a good show with their well-known products. There is no need to remind medical men that the root principle of their process is the presentation of milk in a form that does not curdle in dense masses. If treated with rennet or lemon juice it is precipitated as a fine, soft, flocculent, and hence readily digestible deposit. One excellent new product is the Malted Milk Lunch Tablet, especially intended for business and professional men, lawyers, clergymen, lecturers, vocalists, travellers, golfers, sportsmen, athletes, and cyclists. The tablet is most palatable, and can be carried about in a small bottle in the vest coat packet. We venture to prophesy a great future for these tablets.

The Saccharin Corporation had a handsome stall opposite the main entrance. One of their new products is a valerian preparation, Trivalin (Overlach), a nerve tonic and substitute for morphia. It contains four active principles—valerianic acid, morphia, caffeine, and cocaine. A special advantage claimed for Trivalin is that it does not cause the sickness and persistent vomiting apt to follow the use of morphia. It is given in doses of 1 c.c. once to thrice daily, and is conveniently dispensed in chocolate-covered pilules, which, by the way, are free from the slightest scent of valerian. The Dry Diamalt of the same corporation is now well known as a crystalline malt extract of high digestive and nutritive value. It is made under careful supervision (always essential to this kind of preparation) at Sawbridgworth, in Hertfordshire. It is worthy of note that the product is not touched by hand either in manufacture or in packing, and that it requires no preservative. Medical men in want of anything of the kind will do well to apply to the Saccharin Corporation, 10, Arthur Street, London, E.C., for samples.

Charles Hearson and Co. had an efficient electric centrifuge, carrying four tubes, and attaining 3,200 to 3,500 revolutions per minute, at a cost of £7 to £10, according to size and fittings. The same firm showed their well-known bacteriological incubators, paraffin ovens, and other laboratory apparatus.

CENTRAL MIDWIVES BOARD.

The Board met on July 24th, Sir Francis Champneys presiding. The correspondence dealt with by the Standing Committee included a letter from the Local Government Board transmitting a copy of a letter addressed to the president by Messrs. R. Turner and Son, solicitors, Manchester, on behalf of Mrs. Mary Underwood, Llandudno, complaining of the conduct of a certain midwife. The Board's reply was to the effect that they had heard nothing from the County Council of Carnarvon.

Abnormal Cases Requiring Medical Aid.

To a letter from the Medical Officer of Health for the City of Manchester asking the Board to regard all breech presentations as abnormal cases requiring medical aid, it was agreed to reply that the matter had received careful consideration at each revision of the rules, and that the present rule seemed the most satisfactory, but that the M.O.H.'s letter should be filed for consideration at the next revision of the rules. Letters from a certified midwife, approved by the Board for the purpose of training pupils, complaining of the conduct of another midwife who had been trained by her, resulted in the Board's decision that the complainant herself should be struck off the list of approved midwives, and the matter be referred for further consideration to the Penal Cases Committee.

The previous day the Board held a penal session, when eight out of eleven midwives cited to appear before them were struck off the roll.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, July 26th, 1913.

Subcutaneous Injections of Oxygen Gas.

We have already referred to the utility of subcutaneous injections of oxygen gas in certain affections where the system is very depressed, as in grave pneumonia, pernicious anæmia, consumption, and in all chronic maladies where active regeneration of the blood is indicated. Asphyxia is one of those accidents where this method renders immediate service.

Dr. Bayeux, who has employed these injections in hundreds of cases, has invented an apparatus as convenient as it is simple. It is composed of a polydetensor enclosed in a small box and recipient containing 15 litres of gas that can be carried in the pocket—that is to say, a sufficient quantity for 20 injections.

In cases of asphyxia as many litres as possible should be injected, but in chronic affections certain doses should not be exceeded, and above all the gas should not be injected too rapidly, otherwise the patient would suffer more or less from tension. The rules given by the author are : (*a*) Quantity of gas not to exceed half a litre for the adult, 300 cubic centimetres for the adolescent, 200 for children, and 100 for infants. (*b*) Rapidity of injection not to exceed 4 litres per hour, frequently 3 litres, or ten minutes for 500 c.c. (*c*) Renewal of injection every third day. (*d*) Points of election, the areolar tissue of the flank or the external third of the thigh.

The usual antiseptic precautions being observed, subcutaneous injections of oxygen gas are absolutely without danger; thousands of injections have already been practised without the slightest accident. The method is becoming quickly popular.

Treatment of Tetanus.

The treatment of tetanus is preventive and curative. The preventive treatment, says Dr. Sicard in the *Monde Médical*, consists in sterilising the wound soiled by earth or manure and destroying, if possible, the microbe of Nicolaier by careful disinfection (oxygen water, tincture of iodine), and neutralising the tetanic toxine by preventive injection of antitetanic serum. This latter, however, cannot be relied upon with absolute certainty, as its effects last only eight days, yet it will be always the duty of the surgeon to give the patient the benefit, if any, of the treatment. According to Descamps the injection should be given as soon as possible after the accident and the region injected, arm, flank, thigh, carefully disinfected. Large doses should be given (10 to 30 c.c.) and renewed the following day and two or three days subsequently. In grave traumatisms or prolonged suppuration the serum should be repeated every week until the wound is healed.

The curative treatment embraces a series of therapeutic measures. First, the wound must receive attention, being disinfected, curetted, excised when possible. Against nervous excitability, large loses of chloral associated with bromide of potassium (two or three drachms a day) are prescribed. Bacelli recommends subcutaneous injection of a 2 per cent. solution of phenic acid. More recently sulphate of magnesia has been employed with some encouraging results. Three cubic centimetres of a 25 per cent. solution are injected into the medullary canal, as for lumbar puncture.

In a case of confirmed tetanus, much cannot be expected from serotherapy. However, it should always be tried, as certain authors have reported favourably of the treatment. In any case, subcutaneous injections are too slow in their action; intravenous injections give the best results, as by this way the antitoxin reaches the nerve centres with extreme rapidity. Here also large doses of the serum should be employed (3 to 10 ounces), and repeated every day.

Sicard recommends the rachidian method. After withdrawing from 15 to 40 c.c. of the rachidian fluid, a similar quantity of serum is injected and the patient placed in a position to facilitate the flow of the liquid to the bulb—that is to say, the head and shoulders on a plane lower than the rest of the body. It goes without saying that during the whole of the treatment the patient must be kept free from any excitement and in a darkened room.

GERMANY.

Berlin, July 26th, 1913.

At the Gesellschaft der Charité Aerzte, Hr. Haemisch showed an apparatus that had been constructed for the purpose of enabling a man who had lost the use of his hands to write. He said that what he was about to show had a considerable practical significance. He had been of the opinion that such an apparatus was in existence, and when a few months ago he had a case in which the patient had lost complete use of his hands he had sent the man to Prof. Joachimsthal for the purpose of getting something arranged for him. The idea was that the teeth should be made use of, so that something could be held in the mouth and moved in such a way that the man would be able to write. Hr. Joachimsthal, however, told him that such a thing was new, and he could not see how it could be arranged in the polyclinic. He, however, put himself in communication with the dentist Hr. Grünberg, who in a short time produced the apparatus which answered the purpose and enabled the patient to write quite well. (Patient shown.) For a patient who had lost completely the use of hands to be able still to write, and in this way still to be able to communicate with the outside world in another way than by the limited range of speech alone was a great advantage, not only from a practical business point of view, but the psychical advantages also would be great.

Hr. Ohm showed an apparatus for the photographic registration of

Arterial and Venous Pulse, etc.

The apparatus gave a simultaneous registration of the arterial and venous pulse and the sounds of the heart. He hoped shortly to be in a position to show the diagnostic value of the apparatus and its methods of employment.

Hr. Buth followed with a contribution respecting the

Treatment of Recurrent Fever by Salvarsan.

He said that on February 2nd of the present year a Danish medical man was admitted into hospital. He had been actively engaged in the Servian campaign. On January 30th he left Valjewo in Servia in good health. On his way home he suddenly sickened with a chill on the way from Budapest. There were no rigors, but fever and a headache and a feeling of chilliness. The headaches were very severe. He had, as he thought, hallucinations of vision, and vomited frequently. On February 1st he reached Berlin and sought medical advice, with the result that he was sent into hospital. The diagnosis of recurrent fever was led up to by the patient's own statements that whilst in Servia he had seen several cases of the disease, and he suspected that he had become inoculated with the Obermeier's spirochætæ. He was supported in this by the fact that the prisoners of war amongst whom the disease was rife were infested by vermin—bugs, lice and fleas. As there were no facilities for bathing and no time to look after himself from the great amount of work there was to do, he could not keep himself free from the vermin. Moreover, in preparing a cultivation from blood from a patient suffering from the disease, he had pricked his finger, and he looked on this as the source of his infection. As a matter of fact, spirochætæ were shortly after found in the blood he was then about to examine when he pricked his finger. The diagnosis was therefore pretty clear. Of the other symptoms there were herpes on the lips and a thickly coated tongue, enlargement and tenderness of the spleen, and painful liver. There was also subicteric colouring of the skin and sclera, slight pain in the calves of the legs, great prostration. Hæmatologically the blood was normal. There was no leucocytosis. Albumen and urobilin were present in small quantity; diazo reaction absent, as it always was. From the point of view of treatment a grave omission had been made by the failure to give salvarsan at once. At midday on the 3rd, 0.6 gms. were given intravenously according to instructions. Two hours later there was a rigor with pain in the region of the heart; diarrhœa. After the injection the temperature rose to 40.3°, to go down the followlowing morning to 36.4°. The patient still vomited frequently, but felt himself better. In spite of several careful examinations of the blood no spirilli were to be found.

In considering the critical fall of temperature, its behaviour in Servia had to be taken into account. There the fall took place about the fourth or fifth day, and the relapse followed from the ninth to the tenth. The fall in the case of their patient on the third might have been the usual one for the Servian cases. The day following there was some tendency for it to rise, and it was thought that a relapse was about to take place, so another dose of salvarsan was administered. This was given on the 8th in a dose of 0.4 grm. Here also in about an hour there was a short rigor; the temperature after a time rose to 39°. but sank again; it had not gone beyond the normal since. The reconvalescence was an uninterrupted one. The spleen was no longer palpable. He was discharged quite well, and he had remained so, as he had written to the speaker to that effect. The curves that were shown were typical of the action of salvarsan. A sudden fall of about 4° took place.

Hr. Kraus thought that the rise of temperature that followed the infusion of the salvarsan was due to some want of absolute sterility in the preparation.

Hr. Döhrer said that sterilised saline solution from the apothecary's had been made use of, but it was always followed by fever, rigors and vomiting—(Hr. Kraus: The celebrated salt fever!)—that had led them to get their saline solution made in their own laboratory. Since then they had had no more such cases.

AUSTRIA.

Vienna, July 26th, 1913.

Radio-activity in Therapeutics.

At the recent meeting of the K.k. Gesellschaft der Aerzte in Vienna, a very full and extremely interesting and instructive discussion took place of the uses of "radiant energy" in therapeutics.

Dr. W. Falta expressed the opinion that the Becquerel-rays were equally effective in the treatment of uterine carcinoma, whether emanating from radium, thorium, or actinium; also that whether the alpha-, beta- or gamma-rays are employed, the same chemical and biological effects are produced. Highly active thorium X-preparations are able to oxidise certain organic substances. It has now been found, in the further pursuit of the research suggested by this observation, that the other radio-active substances—actinium, radium—in which the radiations of high activity are retained, or, as the investigations of Riel's clinic have shown, even the radio-active residue of the radium emanations produce corresponding chemical effects. He was also able to show that this result was also effected with equal energy whatever was the group of rays adopted. They took place when the alpha-rays and the feeble beta-rays were screened off; they also occurred with the use of pure alpha-rays and of polonium, which Stefan Meyer had prepared for use. As regards qualitative effects, all the rays, and groups of rays, gave the same results in these researches. But, as regards quantitative results, the researches of Charnas, of Zekner, and his son, agreed in showing a considerable difference. Observation of the spectrophotometric running-down of the decomposition of malachite-green showed that we can obtain as considerable a chemical effect from the employment of a few e.s. epsilon of actinium X as from that of 1,000 e.s. epsilon of thorium X. We also find that the chemical effects of polonium in the reagent-glass experiments are extraordinarily powerful. This fact is easily understood when we remember that the alpha-rays have a very limited province of jurisdiction; while the beta- and gamma-rays of actinium are mostly very weak in action; and those of thorium are, on the other hand, very hard. Now, all these, as in the case of the Becquerel rays, can produce chemical effects only being absorbed; that is to say, when their internal energy has been transmuted into some other form, either directly, or, as in the case of the gamma-rays, through an intermediate stage of conversion into weak, easily-absorbed beta-rays. In experiments with thorium X, it is also to be noted that the greater part of the internal energy of this body is not brought into use in the course of experimental procedure. All three groups of rays have accordingly identical chemical effects, so far as quality is concerned. With similar degrees of intensity they dissolve the molecular bonds; they hydrolyse, oxidise, and decompose colloid solutions. In quantitative reckoning, however, their effects are in the inverse ratio of their penetrating power. With regard to their biological effects the following fundamental law should be recognised. In small doses the effect is to increase the vitality, produce elevation of vital energy, increase of bio-chemical processes in the cells, with extinction of those which lead endothermally to reduction and synthesis; while with the use of large doses we have the limiting effect on synthesis, with simultaneaus increase of the reverse process in the foreground of observation. In the first place we find an increase in the process of growth and corresponding hyperplastic advancement; in the latter case we meet with limitation of the process of growth and relative destruction of tissues. Thus we find also with regard to the general biological effects: a similar qualitative effect, combined with a very different quantitative one—as regards the penetrating powers of the group of rays employed.

Dr. H. Marschik described his experience of the employment of radium therapeusis in the treatment of carcinoma of the larynx and of the pharynx. The results were not unfavourable, though complete success had not been obtained by him.

Dr. H. Schüler pointed out that, as in the case of light rays, the law of the alpha-, beta- and gamma-rays was that their intensity diminished in proportion to the square of the distance. Hence the full economic efficacy of radio-active substances could be obtained only when the exposed objects were placed in the closest possible proximity. On this account, of two equally effective filters the thinner should be chosen—all the more so from the fact that the thick metallic filters, as well as the thin, must be coated with gum, leather, etc., for the purpose of screening off the injurious secondary beta-rays. Unnecessarily thick filters diminish the gamma-rays—an undesired and unexpected diminution of the available radiant materials. According to the measurements of Meyer and Keetmann, in the case of mesothorium corresponding to the strength of 100 mg. $RaBr_2$ equivalents, a silver-gilt filter of 1 mm. thickness sufficed for the interception of the beta-rays. In the use of large quantities of mesothorium behind the Auer filter, and analogous methods, Schüler has not observed any mischievous effects of beta-rays. With such precautions, Redner has simultaneously employed with a patient, as maximum daily dosage, 100 mg. mesothor- and 85 mg. radium-bromid during 24 hours of a "cross-fire" procedure. The law of inverse squares also furnishes the most important starting point for application and dosage of radiant energy in the therapeusis of deep-seated structures; in this class of cases, absorption of the gamma-rays by the intermediate tissues has to be reckoned with, but the loss through this agency was found to be proportionately less than that chargeable to the influence of the law of inverse squares. The utilisation of a thin filter enabled him to construct an apparatus for endovesical radiation of the urinary bladder. (The application of the instrument was here demonstrated.) The procedure was not recommended for treatment of operable tumours, but for the recurrent and inoperable. The short time-period and limited histological experience had not yet given decisive results.

HUNGARY.

Budapest, July 26th, 1913.

THE MISUSE OF HYDROTHERAPEUTIC MEASURES.

DR. DALMADY FOLTAN, Secretary of the Balneological Society, believes that the mistakes in the application of hydrotherapeutic measures are the main reason why this branch of therapeutics has not been more favourably received by the medical profession. The necessary requirements he sums up as follows:—(1) A careful analysis of any deviations from the normal in the organs or their functions—*i.e.*, a careful clinical history; (2) a knowledge of the physiological action of thermic and mechanical stimuli; and (3) a thorough knowledge of the *technique* of the procedures. In febrile diseases the choice of the temperature of the water is entirely dependent upon its action on nerves, vessels and tissues, and it is a great mistake to use, at the beginning of the treatment, water at a very low temperature applied for a short time only and accompanied by only a slight amount of mechanical stimulation. Such baths should be merely cool, long continued, and followed by sufficient mechanical stimulation. In cases of collapse and cardiac weakness, where there is a high body temperature and cold extremities, it is necessary to apply cold to the trunk, and the extremities must be warmed by rubbing with warm alcohol or the application of hot packs. In administering sitz baths, care must always be taken to guard against the loss of heat from the uncovered parts of the body. It is essential that each case be studied on its individual merits, and Dr. Dalmady Foltán believes that the art of acquiring this habit can only be gained from a well-managed hydrotherapeutic clinic.

ON LEFT-SIDED GASTRIC PAIN.

At the recent meeting of the Budapest Interhospital Association, Dr. Benedict read a paper on the above subject. He pointed out that gastric pain occurring reflexly from disease of other abdominal viscera is most often referred to the right side, so that left-sided gastric pain, in the great majority of cases, signifies an affection of the stomach itself. The only two exceptions, fat necrosis of the pancreas and splenic abscess, are so rare that they can be disregarded. An ulcer situated at the pylorus is much harder to diagnose than one in the body of the stomach, since the former gives rise to pain on the right side, which often cannot be distinguished from the pain caused by cholecystitis. With ulcers of the antrum pylori the pain is accurately referred to the median line, just like the reflex abdominal pain caused by chronic appendicitis and that of a hernia of the linea alba. Tumefaction is exceedingly common with ulcers, since the muscularis and serosa will thicken and adhesions will readily form with the neighbouring organs, particularly the liver and the pancreas. A mass may thus be felt to the left of the median line, if the ulcer is situated in the middle portions of the stomach. It is very important to diagnose the case sufficiently early, since the end result will be an hour-glass stomach, which can only be treated by means of an operation. The history is rather characteristic: At first there is an attack of left-sided pain directly after eating, lasting several hours. Several months later there may be another attack, the stomach having been perfectly normal in the meantime. In six months or so the pain comes more often and lasts as long as twelve hours, and the irritability of the stomach increases. Finally, vomiting sets in half an hour after a meal. This is purely reflex, since a stenosis has not yet formed. The pain is now permanent, and vomiting occurs daily, but blood is found in only half of the cases. Operation is indicated if rest in bed for several weeks with hot applications and fluid diet does not result in a cure.

Treatment of Acute Coryza.

According to Dr. E. Baumgarten, late Professor of Rhinology, acute coryza may be successfully aborted by the following combination:—

Sod. salicylate, 30 grammes.
Pulv. Doveri, 3 grammes.

Mix and divide into 20 powders. Give at first every three hours, later two or three times a day.

CANADA.

Toronto, July 21st, 1913.

Annual Meeting of the Canadian Medical Association.

The forty-sixth annual meeting of the Canadian Medical Association was held in London, Ontario, on June 24th, 25th, 26th and 27th, 1913. The meeting was successful so far as the programme and quality of papers were concerned, although somewhat unsatisfactory with regard to attendance. Few more suitable places for such a meeting than London could have been found in Canada. The railway service, both from all parts of the Dominion and from the United States, is excellent, and London itself is a picturesque and thriving city. It well deserves its name of Forest City, the streets and roads being everywhere lined with shady trees. The programme was lengthy, and, on the whole, the papers read were interesting, dealing with questions of immediate concern to the medical profession.

The Presidential Address.

Dr. H. A. McCallum, of London, the President for the year, gave a strong presidential address. He said, in part, that a more active interest in the work of the Association should be taken by the members of the Canadian medical profession. It had done great service in doing away with provincialism and inaugurating great reforms of inestimable benefit to the profession and the public generally. With every practitioner in Canada a member, greater and more beneficent results could be obtained.

The Medical Profession and Nostrums.

Dr. McCallum laid stress upon the necessity for funds to rescue the Association from the exploitation and the commercial enterprise of certain drug houses. The chemical industry of Germany was carefully organised, and it was difficult to know what to accept and what to reject. Trained and scientific censors were needed to give advice and assist in shaping legislation to prevent the sale of nostrums. The promise of the Prime Minister of Canada, the Hon. R. H. Borden, that a portfolio of public health would be created in the near future had given great satisfaction among the members of the profession. Without this a pure food law or federal control of vaccines, serums and drugs would be impossible.

Specialism.

Praise was bestowed on the work of the Carnegie Foundation, but it was meeting with the same difficulty so common in German—that medical men were scientists first and practitioners afterwards. This was a reversion of the natural order of things that was not producing the best results. The outcome was that the medical student of to-day was burdened too much with scientific subjects and laboratory work without being grounded sufficiently in the fundamentals. This was a mistake, and the general practitioner suffered. The larger percentage of the students graduating to-day were going to specialise in surgery, and there was a grave danger that this branch of medical science would crowd the practice of medicine into the background. This was not in the best interests of the profession as a whole or the public. The lack of knowledge of the value of medicines made the practitioner as well as the public victims of the nostrum pedler. Dr. McCallum advocated the annual examination by competent medical men of every adult. School children were examined periodically, but the adult was never examined until sickness compelled him to consult a doctor. Insurance companies had adopted a plan of examining their clients annually, and in his judgment it would be good policy for all men and women to be thoroughly examined once in a year. The necessity for higher degrees and qualifications in medicine and surgery in Canada and the United States was insisted upon. The profession would be improved, and better results would follow. Incidentally, the low fees prevailing in many districts of the Dominion were referred to, and the hope was expressed that there would be a general levelling up in this respect. Dr. McCallum thought that more publicity should be given to the

Achievements of Medical Science.

Certain branches of the profession had pursued this course with much success. Great publicity had been given to the results of vaccination in the prevention of small-pox, and similar results would follow if wider publicity were given to vaccination against typhoid fever. The inroads of tuberculosis had been made public and the support of the people enlisted in stamping out this disease. Similar methods should be adopted in the case of cancer and other diseases. That the profession should not be made an arm of the Civil Service was stated to be the speaker's most emphatic opinion. Then, the public would not be protected against its own gigantic credulity, nor the profession purged of its abuses. A demagogue might arise at any time to attack the profession, and it was best to be armed and ready. In conclusion, he pointed to the wonderful service done by the profession, and hoped that this matchless progress would be continued.

Dr. T. S. Cullen, of Johns Hopkins University, Baltimore, gave the

Address in Gynæcology.

This address was rather an earnest plea for the vigorous prosecution of a popular campaign against cancer than an address in gynæcology. At the Congress of Clinical Surgeons of North America held in New York in November last, some of the more prominent surgeons present advised that a propaganda on popular lines should be at once undertaken for the purpose of informing the general public, and especially women, as to the early symptoms of cancer, so that the disease might be diagnosed and treated ere it had gained such a foothold as to be incurable. Dr. Cullen outlined the steps that had been taken to put this project into practice. It was decided that the proprietors and editors of influential daily journals and of popular magazines must be interested in the movement. Mr. Bok, the proprietor of the *Ladies' Home Journal*, Mr. Collier and Mr. McClure took active measures to disseminate knowledge as to the means of detection of the early symptoms of malignant disease far and wide. The conclusion was come to that in order to reach the ears of the masses, such information must be couched in clear and easily comprehensible language, and that therefore a tried popular writer would achieve this object better than a medical writer. A well-known popular writer was selected, who, after making himself well acquainted with the essential facts regarding cancer and its early symptoms, contributed a series of articles to a magazine of enormous circulation. According to Dr. Cullen, the results of this crusade have been most satisfactory, medical men from all parts of the United States having reported that large numbers of men and women, particularly of women, had come to them for diagnosis, and that in many instances where treatment had been considered necessary the outcome had been most encouraging. Dr. Cullen emphasised the need for interesting women in the movement, not only because women were more prone to the disease, but because the women would also look after the health of the men. The woman is the guardian of the health of the household. Dr. Cullen strongly insisted upon the value of a skilled surgical pathologist, and said that every hospital should possess such a man. Furthermore, he said that every medical man should have had a good training in surgical parthology. The address concluded with the advice to Canadian practitioners that they should initiate a campaign against cancer similar in character to that which had met with such success in the United States.

(*To be continued.*)

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Insurance Act in the Highlands.

The Commissioners have issued their scheme for dealing with the mileage question in the Highlands. It is explained that the scheme is merely provisional and applicable only to the present year, pending arrangements to be made under the Highlands and Islands (Medical Service) Bill about to be introduced in Parliament. Mileage is to be reckoned by the distance along the usual route from the nearest doctor's house, no account being taken of the first three miles by land. Distance along a driving road is "normal mileage"; along paths not used for vehicular traffic, "special mileage." Fractions of a mile are reckoned at the nearest quarter above. To each county is allocated 1s. per normal mile, 2s. 6d. per special mile, and 4s. per water mile. The Insurance Committee shall distribute this sum among the practitioners on the panel who are entitled to participate in it, and in the allocation they may take into account the special circumstances of the case, *e.g.*, in very exceptional circumstances allowance may be made for distances of less than three miles, the sum to be allowed for each normal, special, or water mile, the facilities for conveyance, and the aggregation or segregation of insured persons on any doctor's list. Eventually, the intention is to distribute the available money as equally as possible on the Commissioners' scheme among the different counties, and then to allow each county to distribute its share as equitably as possible among the doctors, taking all local peculiarities into account. From a memorandum it would seem that a great deal of detailed work has been involved in drawing up this scheme. The Commissioners' inspectors obtained the addresses of all insured persons in respect of whom mileage would be payable, and then personally computed for each of them the number of normal, special, or water miles from the nearest doctor. From these data the amount due under the above scale was calculated at £8,220, out of the total grant of £10,000. The Commissioners are prepared to furnish the Committees with the records on which the calculations are based, so as to assist them in allocating their fund; in practice, Insurance Committees will probably find it convenient to adhere as nearly as possible to the method adopted by the Commissioners. The balance of the grant (£1,780) has been set apart to meet special charges in respect of medical benefit, especially as regards mileage for temporary residents.

Baldovan Institution for Mental Defectives.

The 58th annual report of this institution has just been issued. The directors state that as there is at last a prospect that modern legislation will find means of housing and employing the feeble-minded who have passed the years of childhood, it is more than ever the aim of such schools as Baldovan to prepare children for what they will have to do in after life. There is a subsidiary class of children for whom nothing but nursing can be offered; on the other hand, the great majority are capable of learning something—the school, the kitchen, the garden, the household, the laundry, the mechanic's shop, each absorbs its quota of children. During the year 26 pupils were admitted and 14 were discharged, the total number who passed through the Institution in 1912 being 225. The average age of admission was ten; it would be better to send pupils earlier. Six of the new cases were epileptic, one was paralysed, two had heart disease, one was a deaf mute, and one suffered from active tubercle. Less than half were in good bodily condition. Most cases were sent on account of poverty, not on account of their mental defect. This is not as it should be. Some enlightened School Boards send children on account of their mental defect alone—they are pioneers in a movement which is bound to come. Complaint is made of too frequent removal of children after a few months' residence. Interference of this kind with ordinary education would not be tolerated; it is futile to place the right of deciding about the education of a defective within the power of ignorant relatives. Half of the children discharged were unimprovable. Of the thirteen who died, five died from conditions depending on the nervous disease which was responsible for the mental deficiency, four from tubercle, three from epilepsy, two from thoracic disease, and one from hydrocephalus. The income for the year amounted to £5,695 19s. 9d., and the expenditure to £5,746 10s. 6d., leaving a deficit of £50 10s. 9d. The reports of the Lunacy Commissioners on the working of the Institution are satisfactory.

Edinburgh Royal Infirmary.

The managers have elected Mr. L. C. Peel Ritchie, F.R.C.S.E., and Mr. Denis Cotterill, F.R.C.S.E., to be assistant surgeons to the institution. There were a number of applicants for the two posts.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE B.M.A. AND ITS JOURNAL.

To the Editor of The Medical Press and Circular.

Sir,—In France the custom is when a Ministerial speech gains high approval to print it and placard it throughout the country. Your wise, temperate, and impartial leader of to-day—July 23rd—deserves a similar honour within the British Medical Association. The Association has been such a possible mighty power for good. It has achieved comparatively so very little towards the advancement, in any sense of the word, of the profession. This has not been the fault of any individual, or of any group of individuals. It has been due to the combined apathy of the great mass of members. The profession has undergone a rude shaking up over the Insurance Act, and the Association has at last been roused to the necessity of putting its house in order. Up to this crisis, the Association has remained for many years hardly much more than a co-operative society for the publication of a cheap medical journal. The journal has been inexpensive to members, but has been produced at a prodigious cost. It has not only absorbed a great part of the income from subscriptions; it has devoured nearly the whole of the vast sum derived from advertisements—from 50 to 80 pages a week at £5 to £8 a page. There can be no doubt that any business company or any business firm would be able to show annually a big balance on the right side as the result of such a successful enterprise. If the Association in this matter fails, it seems to show that there is something wrong somewhere. My opinion is that the *Journal* is far too bulky, and I would back my opinion as that of the great majority of members. The *Journal* has gradually grown so large that to hold it is a fatigue, to glance through it a labour. I speak for the men in any position in practice who are fairly well occupied. To the student or the idle man the *Journal* may no doubt form a great attraction. To every other class reduction of its size from one quarter to half would afford a great relief. It contains always a great deal that might well be left out. This comprises such things, among others, as ancient medical history, and editorial articles and paragraphs having very little relation to medical science or politics. Very few of the original communications of any sort deserve verbatim record. Most of them, including the epitome of literature, might with advantage be cut down to half or even a quarter of their present length. The same applies to reviews of books. The Supplement is largely made up of items referring to proceedings of divisions and branches, which might be compressed into a few lines. It is often almost as big as the whole *Journal* needs to be. Unless a practitioner is to become to the last degree shoppy and narrow-minded, his reading must not be confined to one or more medical papers. He must read the newspapers, and the local paper if he lives in the country, to inform himself of the affairs of the world, and the working of the authorities under which he acts. In order to prevent intellectual stagnation, he ought to have always on hand a bit of really good literature in the form of an ancient classic or a solid modern work, including some fiction and some poetry. If he does this justice to himself he cannot find time for a medical paper as big as the *Journal;* and it is not wonderful to see in many local practitioners' rooms the *B.M.J.* flung aside with the wrapper not even torn across. Condensation of the *Journal* to half the size must reduce the expense of producing it by thousands a year, whilst its vast circulation must still secure a full supply of advertisements at a high price.

This letter is already long enough. If you do me the honour to publish it I may perhaps later express my views as to the organisation of the Association and the means and methods of its working.

I am, Sir, yours truly,
An Obscure Member.

Brighton.
July 23rd, 1913.

REVIEWS OF BOOKS.

DISEASES OF CHILDREN. (*a*)

Dr. Robert Hutchison's book of lectures on the diseases of children is an old familiar friend, and we welcome it in its renewed youth of a third edition. Dr. Hutchison has taken the opportunity afforded by this new edition not only to revise the whole work, but also to add six new lectures. The lecture on "cœliac disease," one of the new additions, is particularly welcome. The history of this disease is very interesting. The conditions seems to have been first described by Gee in 1888, redescribed under the name of "acholia" by Cheadle, and later rediscovered by Prof. Herter in America. In spite of these descriptions, and of the fact that the disease cannot be considered particularly uncommon, still it is hardly mentioned at all in the text-books, and many medical men are quite unacquainted with it. In this case, too, ignorance is particularly unfortunate, since the disease is readily amenable to the correct treatment. We are glad to think that for the future such ignorance will be impossible, for everyone who is interested in the study of diseases of children is likely to read Dr. Hutchison's book. Beside this, there are two new lectures on the diseases of the respiratory system, one on hysteria in childhood, one on some of the diseases of the heart in childhood, and one on some common affections of the genito-urinary system. It is sufficient to say that the new lectures are quite up to the standard of the old, and without unduly increasing the bulk of the book they make it much more complete. We feel sure that Dr. Hutchison will have to prepare many more editions of his work before he has exhausted the interest of his readers.

LES ARRIERES SCOLAIRES. (*a*)

The subject of education—physical, mental, and technical (which perhaps may be regarded by the majority as a hybrid of the other two)—is admittedly one of the most important and excruciating of the present day. The fact that we are borne, willingly or unwillingly, on the advance wave of the torrential current of democracy, makes some profession (at least) of philanthropy an essential condition of existence. And, in order to the administration of philanthropy, a fair quantum of expert knowledge is absolutely essential. The quality of the foundations on which we are attempting to build—or rebuild—and the texture of the natural investments which we are trying to varnish—or patch up, or re-weave—must surely be studied with minute and successful care if we are to claim anything like righteous justification for our professedly skilled professional interference.

The present contribution to our knowledge (and dependent treatment) of the case of Nature's step-children is one of substantial value. The data, and conclusions thereon based, are all enunciated with the crystalline lucidity which so happily characterises the high-class literature and thought of our enviable Gallic neighbours. Our authors discuss causes under four headings—L'hérédité, le passé morbide, le milieu familial et pédagogique de l'infant arriéré. And their suggestions are far too numerous (and enlightening, even when not exactly convincing) for detailed discussion within the necessarily brief limits of a review. The volume will thoroughly well repay a careful perusal.

MEDICAL NEWS & PASS LISTS.

Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society the claims showed a decided decrease, and are now falling to their normal summer level. The past six months have been very heavy in this department, and the sum of £10,000 has been paid away. The satisfactory feature noted at this meeting was that the new business for June was double that for the same month of the preceding year, and the expansion of this important department is being well maintained during the current month.

It was reported that the Society's candidate for a foundation scholarship at Epsom College was again successful. The annual subscription of 100 guineas which the Society gives is instrumental in procuring a large number of votes, and these are always given to the son or relative of a deceased member of the Society. Since the annual subscription has been given, all the Society's candidates have, so far, been elected. This benefit is given, without extra charge, to members or their children, and has proved of great value. The subscription of 100 guineas to the Royal Medical Benevolent Fund has also been of assistance to the widows of members in obtaining grants of money when in financial distress.

National Association for the Prevention of Infant Mortality.

With the birth-rate steadily declining, and the infant mortality rate, though certainly exceptionally low last year, yet higher than it should be, it is not surprising that a record attendance is anticipated at the English-speaking Conference on Infant Mortality, to be held at Caxton Hall on August 4th and 5th. Practically every country flying the British flag is sending delegates, and there will be, in addition, a large contingent from America. Not only will the Governments themselves of the several Colonies and countries be represented, but also local authorities, hospitals, voluntary infant welfare associations, etc., in large numbers. The Local Government Board supplies, in Mr. Burns, the President, and in Dr.

(*a*) "Lectures on Diseases of Children." By Robert Hutchison, M.D., F.R.C.P. Third Edition. 8vo. pp. xii. and 404. London: Edward Arnold. 1913. Price 10s. 6d. net.

(*a*) "Les Arriérés Scolaires." Conferences Médico-pedigogiques, par le Dr. Marcel Nathan et Henri Durot, avec la collaboration de M. Gobron et de M. Friedel. Paris: Libraire Classique. Fernand Nathan. 1913.

Newsholme, one of the Chairmen of the Sessions, while Mr. Pease, Sir George Newman, Lady Aberdeen, and Dr. Charles Hodgetts (Medical Adviser to the Canadian Commission of Conservation) are Chairmen of other Sessions. Sir Charles Lukis, Director of the Indian Medical Service; Dr. MacCullogh, Medical Officer for the Province of Ontario; Assistant Surg.-General John Kerr, of the U.S. Public Health Service; Dr. Henry Coit, Chairman of the American Association for the Prevention of Infant Mortality; the Duchess of Marlborough; Sir Thomas Barlow and Sir Lauder Brunton, Chairman and Vice-chairman respectively of the National Association for the Prevention of Infant Mortality, which is organising the Conference, will be among those taking an active part.

The Welsh National Memorial to King Edward.

At the annual meeting of the Board of Governors of the King Edward VII. Welsh National Memorial Association for the Prevention and Abolition of Tuberculosis, held at Colwyn Bay on Saturday last, Mr. David Davies, M.P., presiding, an extract was read from a Government White Paper issued that morning announcing that, inasmuch as in Wales the income from the investments of the National Memorial Association was being applied towards the treatment of tuberculosis patients, the Treasury had made a grant in favour of the Association to the extent of one-half of the amount of the income derived from such investments. The President announced that the Association's income amounted to £6,300 per annum, and the grant therefore would amount to £3,150 per annum. A resolution was passed expressing gratification that the Treasury had recognised the principle of making such a grant.

A Manchester merchant, Mr. D. S. Davies, has presented to the Welsh National Memorial Association a piece of land near Denbigh, 244 acres in extent, and valued at £5,000, as a site for a proposed sanatorium for consumptives.

University of London.

The following have passed the M.D. examination for internal and external students:—

Branch I.—Medicine.—A. D. E. Bayliss, B.S., Univ. Coll. Hosp.; T. K. Boney, B.S., St. Bartholomew's; A. Burrows, B.S., London Hosp.; A. N. Cox, B.S., Guy's; G. S. Earl, B.S., St. George's; A. B. Fearnley, B.S., St. Bartholomew's; H. P. Hacker, B.S., B.Sc., King's Coll. Hosp.; C. H. F. Johnston, B.S., Charing Cross Hosp.; E. J. G. Jones, B.S., and D. Kennedy, B.S., Univ. Coll. Hosp.; W. J. O'Donovan, B.S., London Hosp.; Ellen M. Pickard, B.S., London (R.F.H.) Sch. of Med. for Women; C. McM. Wilson, B.S. (University Medal), St. Mary's.

Branch III.—Mental Diseases and Psychology.—J. A. Perdrau, B.S., Univ. Coll. Hosp.

Branch IV.—Midwifery and Diseases of Women.—A. C. S. Courts, B.S., and S. Forsdyke, Univ. Coll. Hosp.; A. W. Jones, B.S., St. Thomas's; Mary E. H. Morris, Lond. Sch. of Med. for Women.

Branch V.—State Medicine.—N. H. Walker, B.S., St. Bartholomew's.

Branch VI.—Tropical Medicine.—C. N. Davis, B.S., St. Bartholomew's.

The following have passed the M.S. examination for internal and external students.—

Branch I.—Surgery.—G. Jefferson (University Medal), Manchester Univ.; T. D. M. Stout, Guy's; J. O. D. Wade, Univ. Coll., Cardiff, and Charing Cross Hosp.; C. H. S. Webb, Middlesex Hosp.

Mr. Webb obtained the number of marks qualifying for the University Medal.

The Indian Medical Service.

The competitive examination for commissions in His Majesty's Indian Medical Service was held on July 21st, 22nd, 23rd, 24th, 25th and 26th, for which 22 candidates presented themselves. Sixteen candidates qualified, and six failed to qualify. The following is a list of the candidates who secured the twelve vacancies which were to be competed for:—

Sahib Singh Sokhey, M.A., B.Sc., M.B., Ch.B., Edin., 3,517; Atul Krishna Sinha, M.B.Calcutta, L.R.C.P., M.R.C.S., D.T.M. and H.Camb., 3,392; Subramanya Doraisamy, L.R.C.P., M.R.C.S., 3,198; James Findlay, M.A., M.B., Ch.B.Glasg., 3,167; Allan Seddon, M.B., Ch.B., 3,146; Jyotish Chandra De, M.B.Calcutta, L.R.C.P., M.R.C.S., 3,072; William Collis Spackman, M.B., B.S.Lond., L.R.C.P., M.R.C.S., 3,061; Nanalal Maganlal Mehta, L.M. and S.Bombay, L.R.C.P., M.R.C.S., 3,039; Charles Harry Powell Allen, L.R.C.P., M.R.C.S., 2,957; Peregrine Stephen Brachenbury Langton, L.R.C.P., M.R.C.S., 2,943; Robert Morrison Easton, M.A., M.B., Ch.B. Aberd., 2,893; Reginald Victor Martin, L.A., L.R.C.P., M.R.C.S., 2,878.

Royal College of Surgeons in Ireland.

The following candidates have passed the undermentioned examinations:—

First Dental Examination, May, 1913.—Edward C. Boursin, M. B. Fisher, Lazarus L. Glick, Martin D. Higgins, Arthur C. Holden, Walter G. Keys, Montague R. Mosbery, James J. Shevilin, George G. Tyson.

Final Dental Examination, May, 1913.—Charles S. Lafferty, John S. Smith.

Primary Fellowship Examination, July, 1913.—R. G. Blair, Hubert C. Carden, John A. Fretton, Herbert Graham, Mary E. Henry, G. T. Hingorani, James B. Magennis, Henry Ross, I.M.S., Jerome Suares, Wm. C. P. Smyly.

Final Fellowship Examination, July, 1913.—Capt. John L. Lunham, I.M.S., Michael McGrath, William G. Ridgway, William R. Watson.

Conjoint Examinations in Ireland.

The following candidates have passed the summer examination of the Royal College of Physicians and the Royal College of Surgeons:—

Preliminary Examination.—D. J. Baldwin, A. H. Boyd, A. J. Crean, M. Donohoe, G. E. Evans, W. Flynn, W. Fielding, S. A. Gailey, Miss E. Gleeson, W. F. Hughes, M. J. Hunt, Miss C. E. Kyle, A. F. Mallon, A. McCambley, R. G. J. McCullagh, E. D. Nolan, V. R. O'Connor, M. J. O'Riordan, Miss H. G. Rea (with honours), P. J. Sheerin, A. A. Townsend, and S. T. Wills.

First Professional Examination.—Arthur Briscoe, Moses Briscoe, Maurice J. Broderick, J. J. Crowe, Francis Daly, William Evans, J. Holland, Henry Hurst, Thomas P. MacDonnell, George F. Maher, Denis B. McEniry, Harold L. Mooney, B. J. Mulligan, Michael J. O'Connor, Marks M. Price, George C. E. Roe, James F. Seale, James G. Thornton, D. E. Young.

Second Professional Examination.—W. G. Thompson (honours), Miss Elizabeth Budd, John Coffey, B. J. Daunt, M. Dockrell, John A. Fretton, J. J. Hayes, B. Hirson, James McGuire, J. A. McKinnon, Miss Marjorie McMullen, Thomas Moore, Thomas F. Moran, J. P. Pegum, Patrick K. I. Ryan, P. J. Sheridan.

Third Professional Examination.—A. P. Adams, S. Barron, W. P. Cooney (honours), J. Dwyer, M. Fitzgibbon, E. G. Foley, S. E. Gordon, J. W. E. Graham, E. N. H. Gray, O. K. Kerrigan, M. J. Loftus, W. G. McConnell, M. Moran, T. O'Donoghue, L. S. O'Grady, G. M. C. Powell, L. M. Rowlette, R. A. Ryan, T. J. Ryan, T. H. Sarsfield, B. Scher, J. A. Watson.

Final Examination.—Patrick Ashe, John D. Cherry, Dominic F. Curran, Hugh A. S. Deane, James Devine, William St. L. Dowse, Thomas R. Elliott, Thomas Gray, Aloysius Humphreys, James Kearney, John Kelly, Francis P. Kennedy, Frederick J. M. Kennedy, William J. P. Lillis, Robert J. May, Patrick M. Moriarty, Edward J. B. Moynihan, B. J. Mullin, Daniel Mullin, Bernard Murphy, Charles McDonnell, Thomas B. Newman, Bernard J. O'Donnell, George E. Pepper, Robert Slaney, Trevor S. Smith, Geoffrey N. Smyth.

Diploma in Public Health Examination.—Miss Ma Saw Sa, F.R.C.S.I. (with honours), Fidelis Conceicao, L.M.S., Emanuel Prisnath Ghose, L.R.C.P. and S. Edin., Miss Singcha Hoashoo, L.R.C.P. and S.Edin., Francis Keane, M.B., R.U.I., Charles E. McNaught, M.D.Dub., Roger Ll. Williams, L.R.C.P. and S.Edin.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Reduplication of the Second Sound.—Core (*Med. Chronicle*, June, 1913) discusses the value of this phenomenon as a diagnostic sign in mitral stenosis. In 173 patients with mitral stenosis there were 66.4 per cent. in whom reduplication of the second sound was audible somewhere over the præcordium. A presystolic murmur was heard in 38 per cent., and a combination of systolic and diastolic murmurs in 36.3 per cent. A systolic murmur either alone or in conjunction with other murmurs was heard in 83.9 per cent. of the cases. Core comes to the conclusion that the double second sound over the præcordium, other than physiological, is one of the most important and certain of the diagnostic signs of mitral stenosis that we possess. If such a doubling remains throughout all phases of respiration, if it is associated, even vaguely, with past rheumatic disease, and above all if it is conjoined with an accentuation of the first sound, the diagnosis of mitral stenosis is certain. The physiological reduplication of the second sound is in the great majority of cases only audible at the end of a deep inspiration, and never throughout the whole respiratory cycle. The doubling is generally rapid and the second element is feeble. K.

The Treatment of Diphtheria Carriers.—Rolleston (*Brit. Journ. of Children's Diseases*, July, 1913) discusses the value of the treatment for diphtheria carriers introduced by Schiotz, of Copenhagen, in 1909, with active cultures of staphylococci. Rolleston first reviews the writings of those who have already recorded their experiences of this method of treatment, and then gives the detailed history of ten patients who were treated by him in this manner. In carrying out this procedure, Rolleston procures a pure culture of the staphylococcus aureus, two or three loopfuls of which is incubated in a broth tube for eighteen to twenty-four hours. With this culture the palate, fauces, and in nasal cases the nostrils as well, are sprayed three or four times a day. After each spraying, swabs dipped in the culture are applied to the tonsils and surrounding parts. A culture is made from the throat before each application, and the treatment is continued till no diphtheria bacilli grow from such culture. An interval of a few days is then allowed to elapse, when a further culture is taken. If this culture is found to be negative the patient is discharged, but if diphtheria bacilli grow the treatment is begun again. In all Rolleston's cases a mild form of sore throat was produced within two or three days of beginning the treatment, an occurrence that was not reported in any of the cases hitherto published, and this sore throat was accompanied by more or less constitutional disturbance. The malaise was considerable, and quite out of proportion to the temperature, which, as a rule, was only slightly raised. The symptoms, however, both local and general, were of short duration, and were not followed by otitis or any other complication. The treatment involves some discomfort, and is not recommended till other methods have been tried and found ineffective, and, furthermore, it should not be employed until the later stages of convalescence. Of the patients treated by Rolleston, in six of the faucial cases the culture findings became negative within two to seven days after starting the treatment. In two nasal cases the treatment was ineffective. In all but two of the patients a mild form of sore throat was produced, but no complications followed. K.

Ankle-clonus without Gross Disease of the Nervous System.—Tileston (*Amer. Journ. of the Med. Sciences*), July 1913) examines the evidence for the belief that for a long time persisted that ankle-clonus is a positive sign of organic disease of the central nervous system. He shows that ankle-clonus, indistinguishable from the genuine, is more or less frequently found in the following conditions:—Acute infectious diseases, especially typhoid; chronic infections associated with marked toxæmia, especially tuberculosis of the lungs in the third stage; uræmia, shortly before and during the acute uræmic seizure; epilepsy, immediately after the convulsion; intoxication from certain drugs, such as hyoscine, ether and chloroform; excessive fatigue; exceptional cases of certain neuroses, such as neurasthenia, hysteria and paralysis agitans; psychoses in the stage of excitement; chronic articular rheumatism. Clonus due to toxic states may usually be distinguished from that of organic nervous disease by the absence of spasticity and of other signs pointing to organic disease, particularly by the absence of the Babinski and Oppenheim toe signs. An exception to the above rule is met with after the medicinal use of hyoscine and immediately after an epileptic attack, in both of which cases the Babinski and Oppenheim signs may be positive. K.

Tuberculosis in Its Relation to Pregnancy, Labour, and the Puerperium.—Lobenstine (*Amer. Jnl. Obs.*, lxvii., 4) considers the subject under six heads—(1) The effect upon the pregnant of an active tuberculous lesion. He concludes that with a healed tuberculous focus a case may proceed through pregnancy, etc., with little or no disturbance. Rapidly repeated pregnancies tend to cause a renewed outbreak. (2) Latent tuberculosis not infrequently becomes active. Mild active cases may stand the strain with little damage, but many will be aggravated. In severe cases the deleterious effects are without question in the majority, and in all advanced stages the cases terminate in an early death. (3) The effect of active disease on the offspring. Here the death-rate is shown to be very high, both at birth and during the first year. Large numbers of the children are born weak and poorly nourished, and even those that are apparently healthy at birth show a tendency to malnutrition. (4) What should be our attitude in regard to lactation? In known cases of tuberculosis, this is a menace to both mother and child, and the ultimate recovery of the mother is likely to be retarded. In the case of the child the danger is great and should not be allowed, even with the greatest supervision. In all truly active cases the ideal method is the isolation of the child. (5) Treatment of the mother. The general treatment is that ordinarily advised. The obstetric treatment is divided into four heads—(*a*) simple abortion; (*b*) abortion followed by resection of the Fallopian tubes; (*c*) abdominal or vaginal hysterectomy after removal of the fœtus; (*d*) artificial abortion followed by excision of the placental site. During the first three months abortion should be performed in all active cases without delay. In the absence of an active lesion this is not justifiable. Salpingectomy is urged in all early active cases. In cases of greater severity the abortion should be followed by hysterectomy. During the second three months operative interference should only be undertaken in those cases which are progressing, and it should include hysterectomy. The results after hysterectomy are shown to be vastly better than after abortion alone. (6) Tuberculosis and marriage. Tuberculous women should be advised not to marry until the disease is fully arrested. In early cases the probability of conception is increased, and in active cases it means an early death of the mother in a large percentage and a child predisposed to infection. The view of compulsory vasectomy and salpingectomy in active cases where marriage is insisted upon is put forward in conjunction with the question of dealing with other hereditary diseases. F.

Ectopic Pregnancy with Anomalous Tubes.—Huffman (*Surg., Gyn. and Obs.*, xvi., 5) has confined the discussion to the objective evidence, regardless of theories based upon clinical data. Twenty-six specimens were examined, but of this number only ten could be examined for anomalies with certainty, and of these seven were associated with gross malformations. From the result of these studies there is ample support for the theory that ectopic pregnancy is caused by imbedding areas which were misplaced during the maldevelopment of the Müllerian ducts. F.

Proctolysis.—Trout (*Surg., Gyn. and Obs.*, xvi., 5), from a study of nearly 1,000 cases and the replies received from a number of hospitals, concludes that following the directions of the majority, and using the amount of fluid said to be absorbed by the rectum, would result in forcing into the patient in 24 hours as much salt as a normal individual would consume in one month. Water has been employed in over 1,000 cases, and there has been no evidence of destruction or irritation of the epithelium. Seven cases developed albuminuria with salt solution, and this disappeared in 24 hours with plain water. The majority of the patients who complained of thirst were those to whom salt was being given—viz., 112 to 9; and the water cases were found to take one-third more fluid than the saline, while the latter required nearly twice as much water by the mouth to allay thirst. The administration of either saline or plain water is shown to decrease nausea and thirst as compared with cases treated without either. The use of plain water is considered preferable to saline, and some reported cases of toxic effects produced by saline are recorded in support of this view. F.

Local Anæsthesia in Fractures and Dislocations.—Braun (*Med. Review*, May, 1913) injects a 1 per cent. solution of novocaine-suprarenin from several different points and in many directions, so that it is thoroughly distributed about the lesion. When the amount of displacement is considerable, the ends of the fractured bone require separate anæsthesia. After a dislocation the anæsthetic is injected around and into the joint. The writer has treated 50 cases of fracture or dislocation by this method, as well as numerous dislocations of the fingers and compound fractures of the arm by anæsthesia of the brachial plexus. In one case of backward dislocation of the elbow, and similarly in another of supracondylar fracture, the anæsthetic was injected through the back of the triceps into the joint, as well as into the joint from both lateral aspects. In 15 cases of dislocation of the shoulder, anæsthesia of the plexus was induced in ten, and injections round the joint were given in five. The former method is the better. Although in one case the dislocation had lasted for weeks it was replaced without difficulty. Several fractures and dislocations of the lower limbs were satisfactorily anæsthetised by local injections, including two cases of backward dislocation of the knee-joint. The amounts of solution used in the knees were respectively 35 and 40 c.c. Two cases of dislocation of the hip were treated. In a sciatic dislocation a long needle was introduced at two points in the gluteal region, and 25 c.c. were injected over the femur and 20 c.c. into the acetabulum. As the femur was no longer a guide to the acetabulum it was disregarded, and the anterior superior iliac spine of the ilium was used as a landmark, immediately behind which the needle was inserted. The point of the needle followed the surface of the ilium until the acetabulum was reached, an innominate bone being held by the side of the patient so as to guide the surgeon as he introduced the needle. The injection was almost immediately followed by relaxation of the previously rigid muscles, and in ten minutes reduction of the dislocation was easily effected. In an obturator dislocation of 48 hours' standing injection about the head of the femur, acetabulum and great trochanter produced complete anæsthesia in five minutes with relaxation of the muscles, and the dislocation was reduced at the first attempt. The writer has had no accidents with this treatment of fractures and dislocations. For the arm he considers injections into the brachial plexus preferable to injections into the injured part, the reverse holding good in the lower limb. He finds reduction of a dislocation easier under a local than under a general anæsthetic. S.

Nauseating Cough in Phthisis.—After prolonged and careful investigations on this question, Dr. H. Paillard has come to conclusions which differ from the classical views. In regard to ætiology, several factors have to be considered—(1) the overloading of the stomach; big meals bring on Morton's cough, therefore the patient must be directed to adopt fragmentary feeding. (2) The fatigue after the meals; this cough is often met with among labourers, workmen, etc., but is not frequent among well-to-do people who can take a complete rest after meals. (3) The period of the disease. Morton's cough is much more common in the first stages of phthisis. (4) The localisation of the pulmonary lesions. It is very common in the common phthisis of the apices, but very rare when pleurisy has already prevented the movements of the left side of the diaphragm. (5) The "status dyspepticus." This was considered by all the classical writers as an essential factor, but the author thinks it is a mere accessory because it is often absent, and furthermore cough is not at all constant in all dyspeptic patients. There are three varieties of Morton's cough: the most typical is the variety which follows on the onset of phthisis; the cough of the later stages of the disease is less frequent, less regular, and more painful. Lastly, the variety which bears no relation to meals but occurs in the morning, especially in patients with pharyngitis, and is not at all special to consumptive patients. The author insists on the feeling of breathlessness which appears after meals and before the cough. The pathogeny of Morton's cough has been very much discussed, and the author discusses it again. He is in favour of the mechanical origin of this cough, and shows how Peter's theory is vague and feeble. According to Paillard the vomiting is due, as in whooping cough, to the jolts and jerks of the cough, and in this respect he insists on the importance of the condition of the diaphragm in the causation of Morton's cough. Experimentally, he has noticed that the fixation of the left side of the diaphragm almost prevents vomiting; clinically he has seen that Morton's cough seldom occurs in patients whose left side of the diaphragm has been fixed by a former pleurisy. Conversely consumptive patients whose left diaphragm has normal or exaggerated movements when breathing or coughing are very often afflicted by the stiffness of the diaphragm, and the "thoracic aspiration" (Arnozan) is deficient; in the second case, *i.e.*, exaggerated movements, the stomach is directly injured and the "thoracic aspiration" is maximum. As to treatment, H. Paillard recommends to give after each meal a few whiffs of oxygen; these inhalations may be repeated if necessary; they relieve the dyspnœa which is so common after meals and reduces the desire to increase the expansion of the thorax and diaphragm. Thus the stomach is given sufficient rest to evacuate its contents at a normal rate. This method, as well as the recommendations which we have seen about ætiology, has given excellent results.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

P. W. R. (Fortis Green).—The price of radium at the present time is about £16,000 per gramme, or the equivalent of £480,000 per ounce, and its production is a very slow process

THE "MEDICAL DIRECTORY" FOR 1914.

To the Editor of The Medical Press and Circular.

Sir,—The annual circular for The Medical Directory will be posted to the members of the medical profession on the 31st inst. If by any chance the circular is not received within a few days of the date of posting, we shall be pleased to forward a copy on request. We trust that all practitioners will make their returns to us promptly, in order that the entries may be as accurate and up to date as possible.

The Directory will, as usual, be published a few days before Christmas, and to this end we ask for the co-operation of the profession.

We are, Sir, yours faithfully,
J. and A. Churchill.

7 Great Marlborough St., London, W.,
July 26th, 1913.

Mr. R. P. (London, S.E.).—Condylomata acuminata are not necessarily specific in character. The growths are probably best removed by touching with the galvano-cautery under general anæsthesia. If preferred a local anæsthetic may be used and a trial be given of cautious painting with the solution of acid nitrate of mercury, followed by a generous powdering with boric acid, starch and zinc oxide.

LEMONADE POWDER.

The following is a good recipe for a palatable substitute for fresh lemons and may be recommended as an excellent cooling beverage:—

Citric acid, ½ ounce.
Tincture of lemon, 6 dr.
Sugar, 1 lb.
Boiling water to 2 pints.

—*The British and Colonial Druggist.*

F.R.C.S. (West Riding).—The older method for the detection of blood-stains with guaiacum resin, yielding a deep blue coloration, has been largely superseded, or rather, confirmed, by the application of several other colour tests, such as the aloin reaction. A solution of isobarbaloin gives an intense raspberry-red coloration, first observed by A. Klunge, and afterwards studied by Prof. Edward Schar, of Strassburg.

MEDICAL INSPECTOR OF FACTORIES, SALARY £500 to £700.

The Home Secretary asks us to announce that he is about to appoint an additional Medical Inspector of Factories at a salary of £500 per annum, rising by annual increments of £20 to a maximum of £700. The appointment will be subject to the usual Civil Service conditions as to retirement, pension, etc. The Medical Inspector will be required to undertake medical inspection, under the direction of the Senior Medical Inspector, in factories, workshops and other places under the Factory Acts in any part of the United Kingdom, and to reside in such place as the Home Secretary may from time to time direct. Candidates should be between the ages of 25 and 40, and applications should be addressed not later than August 15th to the Private Secretary, Home Office, Whitehall, London, S.W., from whom forms can be obtained. Recommendations or testimonials will only be considered if based on personal knowledge of the candidates and candidates are advised not to seek political or social influence, which will prejudice rather than assist the candidature.

Mr. R. Brown (Chiswick).—It is well known that the X-rays possess a malign influence upon the reproductive organs. Manfred Fraenkel found that in the case of guinea-pigs the third generation lost the power of reproduction, even though the original parent alone had been exposed to the rays. The use of an appropriate shield will, however, prevent any injurious effects, such as you have apprehended.

CONFERENCE ON INFANT MORTALITY.

The English-Speaking Conference on Infant Mortality organised by the National Association for the Prevention of Infant Mortality, will be held at the Caxton Hall, Westminster, on August 4th and 5th, under the presidency of Mr. John Burns. Delegates will attend from all parts of the British Empire and from the United States. The chairmen of the sessions will be Dr. Newsholme (Medical Officer of the Local Government Board), Mr. Pease, Sir George Newman, Lady Aberdeen, and Dr. Charles Hodgetts (medical advisor to the Canadian Commission of Conservation). Among those who have promised to take an active part in the proceedings are Sir Charles Lukis (Director of the Indian Medical Service), Dr. MacCullogh (Medical Officer for the Province of Ontario), Assistant Surgeon-General John Kerr (United States Public Health Service), Dr. Henry Coit (Chairman of the American Association for the Prevention of Infant Mortality), the Duchess of Marlborough, Sir Thomas Barlow, and Sir Lauder Brunton. Programmes of the Conference may be obtained from the Secretary of the Association, 4 Tavistock Square, W.C.

Appointments.

Boyers, Hedley, Assistant House Surgeon at the West Bromwich and District Hospital.

Cates, Joseph, M.D.Lond., D.P.H.Cantab., Medical Officer of Health of the County Borough of St. Helens.

Hunt, Matilda, M.D.Lond., Clinical Assistant and Assistant to the Gynæcological Department at the Royal Free Hospital.

Kann, Miss A. L., M.B., B.S.Lond., Anæsthetist to the New Hospital for Women, and Clinical Assistant and Assistant to the Throat, Nose, and Ear Department at the Royal Free Hospital.

Mandrana, K. C., M.R.C.S., L.R.C.P.Lond., House Surgeon at the Italian Hospital.

Moss, Helen I., M.B., B.S.Lond., Assistant Anæsthetist to the Royal Free Hospital.

Radcliffe, Frank, M.D.Vict., Honorary Acting Surgeon to the Oldham Royal Infirmary.

Richardson, A., M.B., B.S.Lond., F.R.C.S.Eng., Surgical Tutor in connection with the Medical School at the University of Leeds and Surgical Registrar to the General Infirmary.

Vacancies.

Canterbury Mental Hospital.—Assistant Medical Officer. Salary £160 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Carlisle Dispensary.—Resident Medical Officer. Salary £150 per annum, with apartments (not board). Applications to the Hon. Secretary, Mr. G. A. Lightfoot, 23 Castle Street, Carlisle.

County Borough of Oldham.—Assistant Medical Officer of Health. Salary £260 per annum. Applications to J. H. Hallsworth, Town Clerk, Town Hall, Oldham.

Swansea General and Eye Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and attendance. Applications to W. D. Hughes, Secretary.

Herts County Asylum, Hill End, St. Albans.—Second Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Herts County Asylum, Hill End, St. Albans.

Warwickshire County Council.—Assistant County Medical Officer of Health. Salary £250 per annum. Applications to A. Bostock Hill, M.Sc., M.D., 14 Temple Street, Birmingham.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to Medical Superintendent, Asylum, Maidstone.

Worcester General Infirmary.—House Physician. Salary £120 per annum, with board, residence, and washing. Applications to William Stallard, Secretary, Worcester Chambers, Pierpoint Street, Worcester.

Holloway Sanatorium Hospital for the Insane, Virginia Water, Surrey.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, laundry, and attendance. Applications to the Medical Superintendent.

Births.

Blomfield.—On July 23rd, at 217 Queen's Road, Peckham, S.E., the wife of Alfred Blomfield, M.R.C.S., L.R.C.P., of a son and daughter.

Carmichael.—On July 22nd, at 40 Palmerston Place, Edinburgh, the wife of E. Scott Carmichael, F.R.C.S.E., of a daughter.

Evans.—On July 25th, at 101 Princes Avenue, Hull, the wife of Harry Loft Evans, M.R.C.S., L.R.C.P., of a son.

Gandy.—On July 23rd, at Norwood, the wife of E. Worsley Gandy, M.R.C.S., L.R.C.P., of a daughter.

Gaster.—On July 24th, at Horley, Surrey, the wife of Sidney Gaster, M.R.C.S., L.R.C.P., of a son.

Grunbaum.—On July 26th, at 92 Portland Place, Doris, the wife of Otto Grunbaum, of a daughter.

Keeling.—On July 23rd, at Attleborough, the wife of George S. Keeling, M.D., of a son.

Palmer.—On July 22nd, at 96 Marine Parade, Worthing, the wife of A. S. Morton Palmer, M.A., M.D., B.C., of a son.

Shapland.—On July 25th, at Burnside, Exmouth, the wife of Dr. J. Dee Shapland, of a son.

Spiers.—On July 25th, at 232 Old Kent Road, S.E., the wife of T. Orr Spiers, M.D., of a daughter.

Waldron.—On July 22nd, at 49 Lauderdale Mansions, W., the wife of Derwent H. R. Waldron, M.B., C.M., Barrister-at-Law, of a son.

Wharry.—On July 24th, at Whitstone Head, Holsworthy, North Devon, the wife of Robert Wharry, M.D., of a son.

Marriages.

Chambers—Buchanan.—On July 26th, at Christ Church, Shooter's Hill, Kent, Dr. W. J. Chambers, of Calgary, Alberta, Canada, to Olive Watson, daughter of Charles Buchanan, of Lloyd's Register.

Dingwall-Fordyce—Warren.—On July 16th, at St. Paul's Church, Ramsgate, A. Dingwall-Fordyce, of Culsh, Aberdeenshire, M.D., F.R.C.P.Edin., to Bessie Ianthe Sutherland, widow of Captain Frank Warren, R.A., daughter of Dr. John Sutherland Gunn, I.M.S.

Finn—Bates.—On July 23rd, at St. Michael's, Chester Square, Allan Rigden Finn, M.D., F.R.C.S., youngest son of the late Mr. G. W. Finn, of Westwood Court, Faversham, Kent, to Jeanie Victor Bates, only daughter of Mr. and Mrs. Isaac Bates, of 56 Blenheim Gardens, N.W., and Wilmington, North Carolina, U.S.A.

Mawhood—Peel.—On July 23rd, at St. Paul's Church, Bedford, Reginald Hawksworth Mawhood, M.B.Cantab., F.R.C.S.Eng., of Chalcots, Ascot, son of Mr. and Mrs. John Mawhood, of Oak Mount, Sheffield, to Phyllis, eldest daughter of the late Mr. E. Lennox Peel and Mrs. Peel, of St. Andrew's Road, Bedford.

Deaths.

Gooding.—On July 27th, John Callender Gooding, M.D., M.R.C.S., of Stanmer House, Cheltenham, in his 76th year.

Groves.—On July 19th, suddenly, at The Lindens, Woodford Green, William George Groves, M.R.C.S., L.R.C.P., M.O.H., in his 78th year.

McInerney.—On July 23rd, at Abertillery, Mon., James Joseph McInerney, L.R.C.P. and S.I., L.M., aged 36.

Wharry.—On July 26th, at Whitstone Head, Cornwall, Marian, the wife of Robert Wharry, M.D., aged 41 years.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, AUGUST 6, 1913. NO. 6.

NOTES AND COMMENTS.

The International Congress of Medicine.

After an interval of thirty-two years, the Seventeenth International Medical Congress, which is held every four years, meets in London to-day. H.R.H. Prince Arthur of Connaught, as the representative of H.M. the King, under whose patronage the Congress is held, will open the proceedings at the Albert Hall at 11 a.m. this morning. A series of important addresses forms part of the programme of this most imposing gathering, for it is safe to say that London has never before witnessed such a galaxy of medical and scientific talent congregated within the Metropolis. The greater number of the meetings will be held within the ancient and royal borough of Kensington, within whose confines are the Albert Hall, the University of London, the Imperial College, the Royal Schools of Science and Art and the Central Technical College. In addition to these stately buildings the Royal Society of Medicine, the Royal College of Physicians of London, the Royal Army Medical College at Millbank, the Royal Dental and St. Thomas's Hospitals are also offering accommodation for sectional meetings. When Sir James Paget was President of the Congress at the London meeting in 1881, it may be recalled that there were 3,182 members and 15 sections. This year, under the Presidency of Sir Thomas Barlow, there will be about 5,000 members, and the work will be carried on in 23 sections and three sub-sections.

Honour to whom Honour.

THE address in medicine is to be delivered to-day at 5.30 p.m., in the Albert Hall by Professor Chauffard, of Paris, while that on surgery will be delivered to-morrow at 2 p.m., by Professor Harvey Cushing, of Harvard University, well known for his work on the pituitary and pineal glands. The distinguished German *savant,* Professor Paul Ehrlich, of "606" fame, will deliver the address in Pathology on Friday, August 8th, at 2 p.m. Next week Professor W. Bateson, F.R.S., addresses the Congress on Heredity, on Monday, August 11th, at 2 p.m., while the President of the Local Government Board, the Rt. Hon. John Burns, M.P., will deliver the address on Public Health on Tuesday, August 12th, at 3 p.m. It is reported that no less than one hundred formal discussions on set subjects are to take place at the sectional meetings, and no less than six hundred papers have been accepted, in addition to numerous demonstrations and exhibitions of cases and specimens. Medical science has made great strides during the last three decades, hence the increased number of the sections that are necessary for carrying on the scientific work of the Congress. Radiotherapeutics, serum and vaccine-therapy and tropical diseases will provide fresh themes for discusson, while, at the same time, many of the older problems will still find a place in the various debates. It is good to have the presence of those amongst us whose names are household words, men of European, nay, of imperial and international fame, men whom the citizens of London as well as the whole medical profession delight to honour. Whatever the outcome of an International Medical Congress may be from the scientific aspect, one thing is certain, namely, that the welfare of humanity as well as the cause of practical medicine, will be greatly promoted thereby.

Dr. F. Koch, of Berlin.

IN its issue of July 30th, *Truth* calls attention to a point that demands immediate investigation by the Executive of the International Medical Congress. On page 256 is reproduced a letter from Mr. C. H. Willi, who is stated to carry on an Institute of Facial Perfection at 475, Oxford Street, London, to a gentleman who had answered an advertisement. The letter announces that Dr. F. Koch, the celebrated Berlin surgeon, "pioneer of facial surgery, discoverer of new methods of correcting unsightly noses, and inventor of many new and important surgical instruments, author of the book, "Disfigured Noses and Their Correction," which I (Mr. C. H. Willi) sent to you some time ago, will be present at the meeting." The letter further says that Dr. Koch will lecture upon the latest achievements with relation to the improving and correction of the shape of the nose, the lecture being illustrated by limelight views and demonstrations of patients who have been successfully treated. "It may interest you," he adds, "to hear that Dr. Koch will also be in London from July 15th to perform nose corrections at my institute." It is impossible to believe that a member of the International Congress of Medicine could be found associating himself with an unqualified individual conducting business of this nature in the manner indicated.

Chapter and Verse.

YET *Truth* gives chapter and verse for the incident. In any case, it seems incumbent on the Council of the Congress to take prompt action in the matter. In the doubtful event of Dr. F. Koch, of Berlin, being really a qualified medical man and a member of the Congress, investigation would be desirable, and we venture to think, inevitable, with a view to disciplinary action both in Germany and in the United Kingdom. If, as seems not improbable, there is nothing to prevent a German surgeon from performing operations in Engand, there is, nevertheless, a moral obligation due to the Congress, and doubtless a certain control over the ethical actions of members vested in the hands of the Executive. On the other hand, should the statements by Mr. C. H. Willi regarding Dr. Koch's relations to the Congress and the limelight lecture and the performing of operations at Mr. Willi's institute prove to be not founded in fact, then the Congress might be expected seriously to consider the legal aspects of the affair. In the letter above quoted Mr. Willi invites his correspondent to attend the lecture at the Congress, and offers to send him "a ticket free of all charge." It may be safely assumed no one will be admitted to any Congress meetings without producing convincing evidence of his *bona fides* as a member or a specially invited or privileged visitor.

Attack on a Dublin Hospital.

Nothing is taken up with such zest by the public as an attack against a purely charitable institution, especially when that institution is a hospital. Every few months some enterprising journal with more knowledge of the public than of the subject fastens on some fact which when misstated appears a criminal offence. We do not blame lay people for stirring up such so-called scandals, we smile in a pitying fashion at their lack of insight. When, however, those who know or ought to know the conditions make serious allegations, our indignation is aroused. A patient applied for admission at Jervis Street Hospital. He was examined and found to be suffering from a chronic disease, which though requiring treatment did not require urgent attention. As there were no vacant beds in the hospital, the patient was sent to the North Dublin Union, to which he was admitted, and where he died two days later. The visiting surgeon to the Union refused to sign the death certificate, giving as his reason that a rumour had reached him that the patient had been turned out of a hospital in a dying condition. Hence followed great commotion in the public Press regarding the cruelty of refusing admission to dying patients, and the callousness not only of the staff of the hospital concerned but of all hospitals, the usual arguments from the particular to the universal being flung broadcast. To act thus on facts is often justifiable, but to rouse public resentment because of rumour is not. A telephonic communication would have settled the matter in a few minutes. As it was, an inquest was held. The result of going into the facts is obvious—the jury found that the hospital authorities and the medical staff were blameless in the matter. They also considered that the visiting surgeon to the workhouse should have signed the certificate. With both points we are in entire agreement.

Buried Talent.

In making the awards for the Raymond Horton-Smith Prize, the M.D. Degree Committee of the University of Cambridge is reported to have placed on record their appreciation of the high standard attained by most of the theses submitted for the M.D. degree. They further state that many of these documents, representing, as they do, a vast amount of clinical investigation on obscure diseases or of original laboratory research, ought to be published. With this recommendation we fully agree, for little practical good can accrue, except to the author, from the most learned thesis, embodying the result, perhaps, of some years' patient observation or research, if it be buried among the archives of a University library. For the sake of medical science the accepted theses for the degree of Doctor of Medicine in all Universities should be published and copies placed in all the principal medical libraries in the United Kingdom. Such a collection of monographs could not fail to prove of the utmost value to students, practitioners, and specialists. Furthermore, we might suggest that the Paris Theses and other Continental monographs of a like nature, might also be rendered available in all the medical libraries, instead of being confined to one as, we believe, is at present the case.

LEADING ARTICLES.

THE ETHICS OF THE PRESS NOTICE.

The confused and often contradictory state of the unwritten laws that govern the ethics of the medical profession in the United Kingdom is at once apparent to those who pay any attention to the matter. It is, in fact, a subject of continual sarcasm to those lay journals which appoint themselves censors of society. The weak points in the professional armour are, first, the absence of any definite rule regulating the publication of signed communications concerning medical matters in public journals, and, secondly, the absence of any machinery for the enforcement of any common standard of conduct amongst medical men. The outcome of this undesirable state of affairs is a certain amount of injustice to some individuals, and of open defiance by others. It would, of course, be absurd to say that no medical man is to address the public upon professional matters, but, while it is difficult on the one hand to set forth precisely how far he may go in that direction, it is, nevertheless, easy in many cases to say decisively when he has overstepped the dimly indicated boundary line laid down by unwritten tradition. An instance in point may be taken from the columns of a London daily newspaper, in which last week appeared an article on cancer. It was written beneath the name of a well-known physician, who has long been recognised as an enthusiastic investigator of the effects of diet in health and disease. His general proposition, so far as can be gathered from a careful perusal of the article in question, is that, according to the published work of certain recent authors—namely, the Hon. Rollo Russell, Mr. H. C. Ross and Dr. J. W. Cropper, cancer is more or less certainly the product of wrong feeding. The writer of the article says that side by side with the increase of cancer we have a corresponding increase in broncho-pneumonia, anæmia and Bright's disease; to which he adds "to-day we know that those diseases are the result of wrong and unnatural food." Neither the views as to the causation of cancer or of the other morbid conditions mentioned would be accepted by the vast majority of medical men. The theory thus advanced, therefore, is contentious and tentative to a degree, and if offered to laymen who are unable to test the truth of the probability may lead to much disappointment, waste of valuable time in seeking established remedies, and monetary loss. In short the publication of theories of this kind by medical men in lay journals cannot be regarded as a wise or dignified proceeding. As things stand in the medical world, however, there is no one to say yea or nay to any member of the medical profession who chooses to air his pet theories in public. The writer of the article above alluded to is physician to a London hospital, and is a man of distinction in his private and professional life. If his publication is justified by tacit professional consent, then every sort of signed communication by any medical man must be equally condoned. If there is to be a rule it must apply all round. There can be no fixing one standard for this medical man and a different one for that, as appears to be suggested by a glance over the names of many eminent medical men who are given to sending signed communications of various kinds to lay newspapers. Another somewhat kindred point of ethics is raised by the lay notices of medical papers read at medical meetings and congresses. Some of the papers read at the Sections of the British Medical Association at Brighton were more or less fully reported and commented upon in the daily newspapers. This occurrence must either be or not be in accordance with medical ethics. At any rate, it has the apparent sanction of the Association itself, for lay newspaper reporters were present in the various sections with the express sanction of the Executive as signified in the shape of official Press tickets. It is obvious that if a reporter be present he has come for the purpose of reporting to his journal, and that the responsibility for the subsequent publication in the daily Press of any medical papers and discussions must rest not with the speakers but with the Association, which has permitted the presence of public reporters. Indeed, were the principle of exclusion of purely medical matters from public Press notice pushed to its logical conclusion the chief addresses of the British Medical Association meetings would be sternly suppressed. The address in medicine, for instance, this year dealt with the highly technical subject of the internal secretions, but it was, nevertheless, widely noticed throughout the public Press of the kingdom. The whole matter of lay publication is riddled with inconsistencies, and it would be well for the British Medical Association to adopt some clear and reasonable policy with regard to its own members. Were the General Medical Council a less academic and more practical body, an appeal might be made to them for light and guidance upon a somewhat perplexing problem.

CURRENT TOPICS.

The Abuse of Prescriptions.

Surprises are always cropping up in the world of politics. A Bill has been introduced into the House of Lords by Lord Lamington to prevent prescriptions containing poisons from being dispensed a second time without authority from the medical man. The matter is one of much greater difficulty than appears on the surface. In the first place, the prescription belongs to, and becomes the property of the patient who pays for it. As such, therefore, the possessor is entitled, of course at his own risk, to make use of it when and how he pleases, whether containing a poisonous drug or not. It is well known that a common practice among certain patients is to hand a prescription from which they have derived benefit to other ailing persons, on the mere chance of good resulting. This may be legitimate, but it is not wise, and it is evidently the object of Lord Lamington's Bill to render illegal this reprehensible procedure. Let it be imagined, however, the confusion to which such a proposal, were it to become law, would lead. The effect of it would be bad for the patient and worse for the doctor. The patient would naturally resent having to visit the latter upon every occasion that the medicine required renewal, while the doctor would be requested to omit everything from his prescription which would render this liability unavoidable. Thus a limit would be placed upon his therapeutic armamentarium, and useful drugs which come under the poison schedule would practically cease to be prescribed. Strychnine, for example, is a scheduled poison. Does the proposed Bill imply that a mixture containing five minims of the liquor strychninæ would require to be endorsed by the medical man upon every occasion that it was prepared? It seems to us that the Poisons Act already in force is quite capable of dealing with the difficulty to which attention has been publicly drawn. It is surely within the power of the chemist, under this Act, to refuse to dispense poisonous drugs which he has reason to believe are being used illegitimately. The matter is one of small detail. The date of the dispensing of every prescription is usually affixed to the document; after, say, the third date so appearing without any evidence of reference to the prescriber a chemist might refuse to supply the drug. Obviously there was no intention to invalidate the Poisons Act by means of a medical man's prescription. The fact, then, that the public are able to obtain repeated supplies of poisonous drugs on the strength of a prescription shows an absence of discretion on the part of the chemist.

Crime Waves.

There has recently been an epidemic of attempted suicide by means of corrosive sublimate in America, and a contemporary blames the press for giving it publicity. It would be as rational to blame a medical review for the spread of typhoid. We do not, of course, doubt that a medical review might precipitate an attack, but only by making things easier for the bacillus. So with suicide. All that the papers did was to arm American Hamlets "against a sea of troubles and by corrosive end them," though to judge by their want of success with so toxic a drug they must have been the merest tyros in suicide. The Press does not incite to crime, though it may determine it, but surely that is not a sufficient reason for treating the public like an embryo criminal.

Atrocities.

A writer in a recent book on criminology defines war as "the highest and most absolute possible expression of crime which has become a mutual affair"; in the sense, perhaps, that it is a reputable or at least a time-honoured outlet for the collective brutality of a people. Events in the Balkans have once more shown that the cruelty of man is exalted when it becomes the cruelty of men. A multitude imbued to the pitch of action with an idea, say, of vengeance, will proceed like a river to attain its end along the lowest levels. The several members of a body of men are as if hypnotised by a corporate aim and tend to act impersonally, blind to the considerations that would restrain them as individuals. As their inhibitive faculties diminish they are left to the growing control of their emotions, and in the end the sword wields the man. A common focus of attention, even, may diminish individual judgment. It is notorious that a jury can be swayed by emotional insincerity on the part of counsel that would absolutely fail to impose on the jurors severally. That is the reason why it is notorious. In a word, men *en masse* are inhibited in their higher nerve centres, and the average man is often reduced to an average animal.

"Sore Labour's Bath."

Cleanliness is next to godliness, and it is right there in Philadelphia. A large firm has offered to give every man in its employment 15 cents every time he takes a bath. There are 700 employés and over two-thirds have accepted the offer. Baths are limited to one a day for each man, and must be taken when he is off duty. The company supplies towels, soap, showerbaths, and "nickel-plated equipment," whatever that may be. It is a great idea. Each of us knows too well the shop man who is continually "washing his hands with invisible soap in imperceptible water." If the idea is extended how happy he will be to think that all his practice has not gone for naught, but will enable him to earn his money in record time. If the British working man takes seriously to the daily bath, after we have recovered from the groundless panic about an insidious, symptomless epidemic of wasting disease, we will find many old notions upset. Not even treacle, let alone blood, will be thicker than the water that flows down the waste-pipes of our factories in the days when soaking is subsidised. While there's life there's soap, and if soft soap is translatable into hard cash the motto will be "pay and the world baths with you, don't and you steep alone."

Acta Virumque.

In this eugenic epoch the disciples of Mendel are fond of impressing upon us the utter unimportance of environment. Our surroundings and the life we live affect us very little: like manure to the pea, they touch us quantitatively but leave us essentially unchanged. Believing all this, as we must to uphold our reputation for modernity, we need no longer bother ourselves, if we ever have, about such questions as the coincidence of trade and type. We used to wonder which was cause and which effect: whether a calling affects a man's manner and appearance, or whether a certain class of man takes up a certain class of work. We all know trades that show types of countenance and conduct in the men that follow them. The stout omnivorous commercial with the "*Je ne sais pas* we call his touch and go." The ruddy butcher whose temporal hair strives to simulate the cornal protuberances of the beasts who die that he may live. And the police—by their boots shall ye know them. So on for columns. Even our own versatile profession has its typifers in the public eye. Two classes of doctor are generally recognised. They may be classed, with emphasis on the fact that the qualities are not mutually exclusive, as "respectable" and "clever." The former is held to be the real doctor, and should have a straggling moustache, a serious middle age and a sympathetic manner. The latter must shave clean and should collect prints or old china. It is a much easier degree to attain to than the other, but there is no need to say so to the man who reads this. He obviously is a combination of the best qualities of both types, and not to be classed with either, but is pedestalled in triumph on a fane of righteousness.

"Examen."

Our system of education affords a great opening for cranks, who are usually people who cannot teach, and therefore can tell others how to do so. For some years examinations of assorted kinds have been the ultimate test, and knowledge which passeth all examinations is of more practical value than a real ability to do. It seems time for us to get rid of this over-systematised method, but it is very hard to replace it by something better. We read, mark, learn, and suffer from internal dyspepsia due to the loads of learned lumber that we cannot assimilate. The most useful quality an educated man can have is a selective forgetfulness. Conventional learning cramps us, but it gives us a ground of common assumption in our relations with each other, and our real education is acquired in our spare time. A glance at the real meaning of "examino" gives us rather a shock. Primarily it means "to form swarms," and is used exclusively of bees, locusts and children loosed from school. The unconscious satire of the lesser Smith epitomises perfectly the pedantic principles of our peerless pedagogues.

The Butter of our Grandfathers.

There can be no doubt of the value of butter as an article of diet. It is blessed alike by vegetarians, fruitarians, and mixtarians (to coin a word) alike. What soul so fastidious or what stomach so pampered as to withstand the attractions of a fine, wholesome, primrose-yellow English country butter? That was so in the days of our youth, but, alas, the butter of to-day for the most part comes no more from English dairies, but hails from distant countries, and is blended with milk and with other mysterious compounds that destroy the flavour and character of the product prized by our grandfathers. The process of blending breaks up the fat molecules, so that the butter no longer cuts cleanly, but clings obstinately to the blade of the knife and clings greasily to the crockery. The cheaper so-called butters are as a rule permeated with mould fungus and have no pretension to the real distinctive butter flavour. Yet good, old-fashioned country butter can command a higher price than ever it did, if there were only some way of bringing it from farmer to customer without the intervention of the middleman, who has well-nigh succeeded in destroying our native cheese and butter industry.

The Prevention of Trypanosome Infection in Africa.

The question as to whether the destruction of game in certain parts of Africa would lead to a diminution in the amount of trypanosome diseases of animals and man is one which has been uppermost in the minds of many experts in tropical disease owing to recent researches. It is satisfactory to note, therefore, that the Secretary of State for the Colonies has nominated a Committee to report: (1) Upon the present knowledge available on the questions of the parts played by wild animals and tsetse flies in Africa in the maintenance and spread of trypanosome infections of man and stock; (2) Whether it is necessary and feasible to carry out an experiment of game destruction in a localised area in order to gain further knowledge on these questions, and, if so, to decide the locality, probable cost, and other details of such an experiment, and to provide a scheme for its conduct; (3) whether it is advisable to attempt the extermination of wild animals, either generally or locally, with a view of checking the trypanosome diseases of man and stock; and (4) whether any other measures should be taken in order to obtain means of controlling these diseases. The Committee will be composed as follows: The Right Hon. the Earl of Desart, K.C.B. (Chairman); Mr. E. E. Austen, British Museum (Natural History); Dr. A. G. Bagshawe, Director of the Tropical Diseases Bureau; Dr. Andrew Balfour, C.M.G., late Director of the Wellcome Research Laboratories, Gordon College, Khartum; Sir John Rose Bradford, K.C.M.G., Secretary of the Royal Society; Mr. E. North Buxton, Chairmon of Quarter Sessions, Essex; Dr. W. A. Chapple, M.P.; Sir Mackenzie D. Chalmers, K.C.B., C.S.I.; Lieutenant-Colonel Sir W. B. Leishman, F.R.S., Professor of Pathology, Royal Army Medical College; Sir Edmund G. Loder, Bart., Vice-President of the Zoological Society; Dr. C. J. Martin, F.R.S., Director of the Lister Institute of Preventive Medicine; Mr. J. Duncan Miller, M.P.; Dr. P. Chalmers Mitchell, F.R.S., Secretary of the Zoological Society; Professor R. Newstead, F.R.S., Liverpool University; Mr. H. J. Read, C.M.G., Colonial Office; The Hon. L. Walter Rothschild, F.R.S.; and Sir Stewart Stockman, Chief Veterinary Officer, Board of Agriculture and Fisheries. Mr. A. C. C. Parkinson, of the Colonial Office, will act as Secretary.

PERSONAL.

The Duchess of Albany visited the Cobham Cottage Hospital on the 30th ult. and opened a new ward and operating theatre, erected at the cost of about £12,000.

Mr. W. McAdam Eccles, M.S.Lond., F.R.C.S., has been appointed Surgeon to the London Temperance Hospital.

Dr. Farquhar Macrae has been appointed Tuberculosis Medical Officer for Aberdeenshire.

Mr. Arthur H. Evans, M.S., F.R.C.S., has been appointed Surgeon to the London Temperance Hospital.

Dr. G. S. Glass, M.B., D.P.H., has been appointed Assistant Medical Officer of Health for the Borough of Southampton.

Mr. James Mclure, F.R.C.S.Eng., has been appointed Surgeon to Outpatients at the London Temperance Hospital.

Dr. John Scott Haldane, M.D., F.R.S., has been awarded the Baly Medal of the Royal College of Physicians of London.

Mr. John Stroud Hosford, F.R.C.S.Edin., has been appointed Ophthalmic Surgeon to the London Temperance Hospital.

Dr. Allan Hastings Hanley, C.M.G., F.R.C.S.I., has been appointed Resident Medical Superintendent of the Peamount Sanatorium.

Dr. Charles Hewitt Miller, M.D.Cantab., M.R.C.P.Lond., has been appointed Assistant Physician to the London Hospital.

Mr. J. Gay French, M.S.Lond., F.R.C.S., has been appointed Surgeon-in-Charge of the Throat, Nose and Ear Department at the Royal Free Hospital.

Dr. John Guy, Tuberculosis Medical Officer for the County of Gloucestershire, has been appointed to a similar post by the Edinburgh Town Council.

Dr. C. J. Campbell Faill, M.R.C.P.Edin., L.R.C.S.Edin., has been appointed Tuberculosis Medical Officer for the City and County of Bristol.

The title of Assistant Professor of Hygiene and Public Health at King's College, London (University of London) has been conferred upon Dr. David Sommerville.

The entrance science scholarships at St. Thomas's Hospital Medical and Surgical College have been awarded to W. E. Le Gros Clark, £150, and S. A. T. Wade, £60.

Dr. Malcolm Donaldson, M.B., B.C.Cantab., has been appointed Demonstrator of Midwifery in the Medical School of St. Bartholomew's Hospital, dating from October, 1913.

Mr. S. H. Warren, M.R.C.S., L.R.C.P., D.P.H., Demonstrator of Bacteriology at the University College Hospital Medical School, has been appointed Graham Scholar in Pathology for the sessions 1913-14 and 1914-15.

Mr. A. Rendle Short, F.R.C.S., Assistant Surgeon to the Bristol Royal Infirmary, has been elected a member of the Board of Examiners in Anatomy and Physiology for the Fellowship of the Royal College of Surgeons of England.

The announcement of the retirement of Dr. Francis Warner from the active medical staff of the London Hospital will be received with widespread regret by "London" men, past and present. That institution will, however, retain his services as Medical Examiner of nursing candidates.

The Charles Murchison Scholarship, instituted in 1880, to perpetuate the memory of Dr. Murchison, and awarded alternately by the University of Edinburgh and the Royal College of Physicians of London, has been awarded by the University to Alan W. S. Sichel, B.A., M.B., Ch.B.

On Wednesday evening last a large number of Veterinary Surgeons from all parts of the Kingdom entertained Sir John McFadyean, M.R.C.V.S., M.B., B.Sc., at a dinner held at the Trocadero Restaurant. Sir John is a member of the Royal Commission on Tuberculosis, and Principal of the Royal Veterinary College.

Fleet-Surgeon O. W. Andrews, in charge of the Medical Department of Devonport Dockyard since August 17th last, who retired the other day from the Navy with the rank of Deputy Surgeon-General, has left Devonport to take over the appointment of Medical Officer of the Forest of Dean, under the Gloucester County Council.

The Raymond Horton-Smith Prize for 1913 in the University of Cambridge has been awarded to Dr. F. A. Roper (Trinity) and Dr. F. S. Scales (Jesus), who were adjudged equal for their theses for the degree of M.D. on the following subjects respectively: —"Creatinine and Creatin Metabolism, especially in reference to Diabetes," and "The Electrocardiogram as an Aid to Diagnosis."

An interesting ceremony took place last week at the Royal Society of Medicine, when Sir Thomas B. Crosby, M.D., last year's Lord Mayor of London, was presented with a service of silver plate and a book containing the signatures of about 300 medical men who had subscribed thereto. The presentation was made by Sir Rickman Godlee and Mr. Bramley Taylor, and Sir Thomas Barlow was in the chair.

Mr. James Henry Targett, M.B., M.S., F.R.C.S., of 19 Upper Wimpole Street, W., obstetric surgeon and lecturer at Guy's Hospital, and senior examiner in midwifery to the Conjoint Examining Board, who died on May 27th, aged 51, left estate of the gross value of £35,722, of which the net personalty has been sworn at £35,474. He left his shares in the Clinical Research Association (Limited) to the treasurer of Guy's Hospital, for the benefit of the pathological department of the medical school of that hospital.

CLINICAL LECTURE

ON

DIAGNOSIS IN RESPECT OF CERTAIN SYMPTOMS AND SIGNS IN CHILDREN. (*a*)

By SHEFFIELD NEAVE, B.A.Oxon., M.R.C.P.Lond.,

Physician to the Queen's Hospital for Children.

MENINGISMUS.

THE complex of signs and symptoms which have been well named meningismus owing to their similitude to meningitis itself is much commoner in children than in adults. At the commencement diagnosis between the two is often difficult.

The word meningismus is not to be found in older text books. It was noticed that many cases of disease were accompanied by some of the signs of approaching meningitis, but that these passed away, and one was left with a frank case of some ordinary ailment. This word was therefore coined for this state of things, and it would appear that though there is irritation of the same structures in both cases, yet the cause is of different nature.

One must not include as meningismus any affection of the meninges or cortex that can be recognised *post mortem*. In typhoid fever and pneumococcic attacks, for instance, both a definite attack on these membranes may be made by the bacillus itself, the gross effects of which are recognisable *post mortem*, and in other cases an imitating meningismus may occur early in the same disease. We may distinguish between the two pathologically by saying that the meningismus is due to the toxin of the causative micro-organism, while meningitis itself is due to the migration of the micro-organism itself into the meningeal tissues.

On the other hand, one is perhaps apt to use the word toxin a little too glibly without really being able to prove its existence, but it seems the best explanation for the moment. It is possible in this way that meningitis may be preceded by meningismus, that is to say that the intra-cranial attack may be commenced by the toxins of the micro-organism before its actual arrival on the spot, some even go so far as to say meningismus is only an abortive attack of meningitis. On the other hand, some of the attacks of meningismus do not appear to be traceable to an organism.

Many signs are common to the two affections, but the following are practically never present in meningismus :—

1. A bulging anterior fontanelle.
2. Optic neuritis.
3. Grouped breathing.
4. Abnormal cerebrospinal fluid.

(Some qualification should be made perhaps as to the last point, as Horder states that a slight increase of albumen and lymphocytes has been found.)

Besides a differential diagnosis from meningitis we have also to determine the disease which causes the meningismus.

As we have seen above, before an acute disease declares itself there are often a number of signs that are termed prodromal, and among those connected with the nervous system are those of meningismus, which may closely simulate the onset of meningitis, instead of really being precursors to a quite different disease.

In addition to acute diseases there are also a number of more chronic pathological states in which marked nervous symptoms may flare up into the same picture of cranial irritation :—

(A).—Pneumonia, typhoid fever, entero-gastritis, form examples of acute attacks not usually accompanied by meningismus.

(B).—Constipation, difficult dentition, otitis media, are some of the more chronic ailments which may have the same affection in their course.

A.—In the first set of instances it may be some days before a correct diagnosis is made between the two ailments, and not unfrequently these cases are sent into hospital as meningitis, which at this stage is often really the more probable diagnosis.

(1) The commencing signs of pneumonia are proverbially protean, and they include the syndrome to which the name of meningismus has been given. In children the disturbance of the nervous system is less in this disease than in adults, but, nevertheless, one sees a good many marked cases of it. One has seen pain in the abdomen with concomitant signs lead to a diagnosis of peritonitis or some cognate inflammation only for it all to rapidly disappear and to be followed in its turn, perhaps, by signs of meningismus. Headache, vomit, delirium, retraction, photophobia, squint, a desire not to be disturbed, with intervals of semi-conscious and cephalic cry, may all be present, but pass off in their turn as the lung signs become more marked. They may continue for some days, though on the other hand they may not last many hours. After this display of so many signs and symptoms the practitioner is then left with an ordinary case of pneumonia with which to deal. It must be remembered, too, in children that the chest signs of consolidation may appear quite late in the disease, even close on the crisis.

There is a connection between apical pneumonia and nervous symptoms which is not well understood, thus in adults heavy drinkers and cases of D.T. are peculiarly liable to this form. In the same way in children if meningismus occur as a prodromal of pneumonia it is probably apical. In pneumonia the number of apical cases, too, are greater in children than in adults, being about one-third of the whole. The rate of respiration is of great assistance in diagnosis from meningitis, and the temperature will give some clue ; thus in basal meningitis the rate of breathing is not often increased, and if there is a high temperature it is usually accompanied by complete remissions, while in the tubercular variety the breathing is also not rapid and the temperature is not often above 101°. On the other hand, herpes is common in both meningitis and pneumonia.

(2) Meningismus in typhoid fever may similarly occur as a prodromal sign, and here we do not have the rise in the rate of respiration nor so marked a rise in the temperature to help us. Typhoid fever is in any case often hard to diagnose in children, so that diagnosis as to these prodromal nervous symptoms perhaps presents the greatest difficulties in this instance, and a "wait and see" policy will often have to be adopted, with a revision of the whole case at every visit. We have already said that true meningitis may occur as well in the course of the disease.

(3) The meningismus which accompanies *entero-gastritis* (but more especially the form of *summer-diarrhœa*) and *cyclic-vomiting* may often be distinguished from meningitis by the depressed fontanelle, in contradistinction to the fontanelle in that disease, which is tense and raised by the internal pressure of the cerebrospinal fluid. It must, however, be remembered that if a large quantity of this fluid be removed, pressure being thus reduced the fontanelle may be no longer affected. This obtains in cases where men-

---

(*a*) Lecture to Post-graduates delivered Tuesday, May 3rd, 1913.

ingitis has been treated by continuous drainage of the cerebrospinal fluid, and the fontanelle is thus depressed instead of raised.

In all these cases an early lumbar puncture is very advisable in view of diagnosis; nowadays this little operation may be considered quite safe if the ordinary precautions are carried out with care. It may even be of some use as treatment by reducing the intrathecal pressure. In meningismus, as we have seen, the cerebrospinal fluid is normal, so that if this is found to be the case a favourable diagnosis is more likely to be correct, though another specimen should be examined later if the symptoms persist. In this way the naked eye observations that the fluid is turbid or not before any report is made by a pathologist may be of great value.

B.—In the second group of the more chronic ailments in which meningismus may appear we may take the following:—

(1) *Constipation* is both the accompaniment and the cause of so many other ailments that it is useful always to hesitate to give any diagnosis where it exists until the bowel has been emptied, unless there is something undoubted to go by. This rule is more than ever useful in the meningismus caused by it, as constipation is also a common sign of true meningitis, and one is often led to expect this, when really an aperient will set matters right in a few hours.

(2) *Difficult dentition* presents us with another instance, and in respect of this there has been much discussion as to how many of the signs and symptoms that occur during the process should be put down to it, or whether they are not due to some coincident malady.

Dentition is certainly the cause of some symptoms on its own account, but rickets, for instance, if concurrent will cause a temperature and aggravate the swelling of the gums. Yet there is a residue of cases, however small in number, where there is nothing but dentition itself to account for *twitchings*, *convulsions*, *squint*, and *retraction* of the head preceded by irritable *restlessness*. A point in diagnosis which, however, may help us are the violent *screaming fits* which may occur. These appear to be of *nervous origin* rather than to be caused by any pain that may be present, and sometimes may be of an almost maniacal character. These cries differ in intensity from the cephalic cry of meningitis, although of cephalic origin. All such symptoms in any cases are naturally more likely to occur in specially nervous children, and the crying is usually at night for some reason.

(3) *Otitis media* may accompany difficult dentition, and has been thought by some to be an extension of inflammation from the gums, at any rate it is an affection that may well account for either meningismus or meningitis.

Wasting.

The physician meets this sign every day in practice connected with the ailments of children, in fact, on being consulted, one of the preliminary thoughts that enter his mind should be how well or how badly the child appears to be nourished.

The cause of wasting is sometimes difficult to ascertain and it may only be possible to arrive at a diagnosis after the results of treatment are known, and several remarks will be made here in respect of treatment on this account.

From the point of view of ætiology this subject may be divided into:—

1. Marasmus.
2. Wasting having a direct cause.
3. Wasting as a secondary sign of some disease.

1. *Marasmus.*—This disease, from a clinical point of view, may be defined as wasting where examination in life and *post mortem* yields only the same signs as in cases of starvation, and where any complication that exists might equally occur in starvation. Digestion appears to proceed, and the stools may be natural, but the child wastes and the weight becomes less and less, and as exhaustion increases sudden death often supervenes, treatment having completely failed.

It is obvious that these cases of inability to assimilate must be found in early infancy, as this incapacity of a particular type of cells is, in the absence of actual disease, much more likely to be developmental and congenital than acquired. Theoretically absence of assimilation may be due to the failure of the secreting and excreting cells of the digestive organs, or to the inability of the general tissue cells to absorb their productions, but the latter is unlikely seeing that these cells must have already had this power of absorbing nutriment from the maternal blood in utero.

It is common to find that a case of marasmus is in a baby coming at the end of a long series of confinements with exhaustion of the mother

The inability to assimilate may not be complete, and it is on the chance of this that treatment may be undertaken with some hope of success.

In the diagnosis of marasmus one must of course start by endeavouring to exclude disease and other causes of wasting. These are numerous and will be dealt with later, but no effort should be spared not to treat a case as marasmus which has an ascertainable cause. One has to start by endeavouring to ascertain whether the child or the food, or both, are at fault, or, again, whether there is disease.

It has often been observed that our knowledge in respect of the internal secretions of many organs is highly deficient, and it has been thought that as some of them certainly influence development, some of these secretions and their resulting hormones may be at fault in marasmus, but the administration of thyroid, pituitary and adrenal extracts have not met with much success, and very little more so far is to be said for pancreatic extract, secretin and other bowel extracts, which have been suggested. The idea, however, opens up a wide field for investigation.

2. *Wasting having a direct cause.*—This subject may be divided under the following heads:—

(1) Absence of food or its obstruction on its way to the assimilating organs.

(2) Deficient or improper food.

(3) Defective action of organs connected with the preparation, assimilation or storage of food.

(4) Cachectic states due to evil surroundings or habits;

1. As instances of absence of food and its obstruction the following will suffice

The teat of the breast or the teat of the bottle, due to shape or deficient aperture, may be at fault, the milk not passing, or the bottle may be so arranged that no air entry prevents the exit of the milk.

The sucking power may be deficient, or the milk may not pass beyond the mouth and pharynx because the sucking or swallowing powers are faulty. Harelip split palate, obstructed nose, obstructed larynx, are examples of this difficulty. Pyloric obstruction complete or partial, causes the return of the food from the stomach.

The child may refuse to take the food owing to some evil flavour or discomfort in the manner of feeding.

Diagnosis being made in these cases, the treatment aims at allowing the mechanical passage of the food

2. Deficient or improper food

(a) The breast may not secrete sufficient milk. To ascertain this the baby should be weighed before and after (*a*) sucking. Some of the constituents may be deficient, hence an examination of it must be made to ascertain the percentages of them.

(b) Some drug that is deleterious to the infant may be excreted with it. The drugs that may be excreted with the milk include saline aperients, salicilates, quinine and arsenic, as well as the haloids and mercury. The two drugs among these that would probably give the milk a marked flavour are quinine and potassium iodide.

The contents of the bottle may be deficient in amount or of wrong dilution or constitution. It may be here said that the underlying principle in the matter of dilution should be to see how strong of milk the mixture should be for each particular infant; thus we must

---

(*a*) Particulars of this process were published by Dr. Er Pritchard, *Lancet*, September 2nd, 1911.

experiment with each case to see how little water need be added, and not treat all babies in accordance with a list of dilutions out of some book as if they were all made in the same mould.

3. Organs connected with the preparation and assimilation or storage of food may be defective in function or constitution, thus the gastric secretions may be deficient or in excess, and the liver may not be secreting bile in proper quantity or quality, or some obstruction to its passage to the intestines may exist. The pancreas may be at fault, as is proved in some cases by success obtained occasionally through the administration of liq. pancreaticus. Chronic constipation, tape and other worms, may also be mentioned here, likewise the question of bad teeth, and inferior mastication among older children must not be forgotten.

The main difficulty, however, is manifested by symptoms of indigestion, such as vomit, diarrhœa, constipation and screaming, and to overcome wasting under these circumstances is a task involving much work and difficulty in many instances. Drugs may be of value, but the fault may be inherent in the feeding.

In the feeding of infants on the bottle two important theories run through the principles of treatment. Firstly, that the constituents of the milk should be approximated to human milk; secondly, that this having failed it is only one of the constituents that the child cannot digest and that this must be reduced.

To avoid the trouble that the above involves the peptonising of the milk is often a short cut to success, but when this fails the incapacity to deal with the three main constituents of milk may each be suspected, and these in turn as constituting the difficulty, may be reduced to a minimum in the diet administered. I mean, of course, proteids, fats, and carbohydrates, *i.e.*, casein, cream and sugar, and it is best to take them in this order when commencing to experiment with the food. It is usual in England to look upon proteids as being most often the difficulty in the digestion of children, but in Germany the fat is often considered the greatest delinquent. Among the lower classes too much sugar, and in the upper, too much cream is ordinarily given, so that these mistakes should be corrected before going further. The methods of making these reductions have been discussed *ad nauseam*, and may be found in any text book on children, but a few words may not be out of place here, as some habitual plan of action is of value in thinking out the pros and cons of a case.

Whey contains the sugar, the lactalbumen, the salts, and 1 per cent. of the fat, so that it makes a good foundation for the making of proportionate mixtures, as the casein, and most of the fat has been got rid of, and there is less sugar in cow's than human milk. In fact, each constituent is present but in less proportion than in human milk.

If more proteid is desired albulactin can be added, if more fat cream can be added and the sugar can also be made up. To increase the proteid lactalbumen is suggested, as the proteid in human milk is lactalbumen with very little casein.

A very diluted milk is not unfrequently useful, but this, of course, merely reduces all the constituents *en bloc*, both those that are well digested and those that are not. To this, of course, more of each constituent can be added as required, and this process is simpler for poor surroundings.

The amount at each feed will also have to be considered, and the frequency of feeding, as well as the question of giving raw milk as against boiling or heating it. The gain in weight does not seem to be in proportion to the amount of milk apparently digested, and in some cases when a baby is not thriving although taking a largish quantity it may be advisable to try some reduction.

In addition to those cases which respond to the modification of the proportions of the milk constituents, there are instances of success attending that which is more purely empirical and artificial treatment, thus preserved milk of the sweetened variety diluted one to three parts water contains about the same proportion of milk constituents as whey. Dried milk may also be tried. Sodium citrate one to two grains to the ounce of milk is supposed to diminish the size of the curd of cow's milk, and in some cases permits of this being taken without dilution. It may, however, aggravate œdema and purpura, which are well-known complications of extreme wasting. Its action in some cases may be connected with its action on acids produced by the excess of sugar which mothers are apt to insert in the bottle.

As a more rare instance of success attending an empirical treatment, it is generally held that starch is incapable of digestion before seven months, and yet there are exceptions recorded, however rare, where it seems to act satisfactorily, and it is stated that the Chinese successfully rear their infants on rice water. On the same principle malted milk has had its successes, and it has been recommended to boil arrowroot with veal broth in place of the usual albumen water as an interim diet before returning to milk where this has been temporarily contra-indicated.

A word of warning should be entered here against a constant change of an infant's diet, as it not unfrequently happens that by persevering with one diet the digestive organs seem to accommodate themselves to it, while a sudden change in a bad case may appear to bring about a fatal result. When a weak wasted infant is brought to you, you are usually confronted with the serious fact that you have only a certain number of days of life in the infant left in which to hit off the life-saving diet if such exists at all, so that there is a temptation to make changes of diet too soon and too frequently.

This indigestion and wasting may occur both with the breast-fed and bottle-fed infants. The breast milk in the former case cannot well be modified, though a good deal can be done by attention to the diet of the mother, and by use of the bottle in substitution or addition to the breast milk.

There is a point here which, though not new, has been enlarged by further knowledge lately. I refer to what is called the biological value of milk. For instance, why should a wet nurse from the country be better than one from the town? Why should fowls suffer from polyneuritis and Chinamen from beri-beri, when a minute particle of pyramidine be removed from a rice diet by polishing the grain, and be cured by administering it to them again? Why should heating all food up to 120° C.C. cause scurvy,—and retard growth? (*a*)

Again, cows can be so fed with artificial food that their milk produces gastric disturbances in children; under these circumstances it is necessary that the food of the mother during lactation should be carefully looked to, so that it should not be too much of an artificial nature.

(4) Under the head of general cachectic states due to condition and evil surroundings or habits, come a number of cases commonly met with. *Poverty*, *prematurity*, *ill-development*, are not so hard to diagnose, while *exposure to weather*, *confinement to the house in bad air*, *want of sleep*, and *over fatigue* may be more difficult to discover, although they may be equally causes of wasting. *Masturbation* should also not be forgotten.

3. *Wasting as a secondary sign of some disease.*—We need not dwell on the wasting that occurs in the course of any long illness, but we may take the following as the more prominent instances in which we may get some cases where wasting is the only sign to be discovered on a clinical examination, though usually it occurs only as a secondary sign :—

(1) Syphilis.
(2) Tuberculosis.
(3) Congenital heart disease.
(4) Empyema.

Of these diseases which usually cause wasting as a secondary sign, syphilis and tuberculosis stand out

---

(*a*) Crookshank, *Jl. Children Diseases*, November, 1912.

pre-eminently. The former claims more cases in infancy, the latter in childhood.

(1) *Syphilis.*—There seems no doubt that syphilis can exist with the only symptom of wasting, and in the past the exhibition of mercury has often been the only practical way of shewing this. It frequently happens that the mother's history of herself, her confinements and her children reveals nothing, and yet that congenital syphilis exists in the child brought to you. The Wassermann test has now, however, considerably reduced the difficulty. Of course, wasting is not usually the only sign met with, but these cases exist. The facies, the skin, snuffles, condylomata, enlargement of the spleen and other viscera, as well as much long hair in infants, and peculiarities of the teeth in older children are all things to be carefully looked for as corroborative signs.

(2) *Tuberculosis.*—Tuberculosis in children is a common cause of wasting. Of course, when its existence is obvious causation presents no difficulty to the practitioner, but it sometimes occurs in such a way as to be a great puzzle. Thus a dissemination of small tubercular points in the lungs, pleura and peritoneum may exist without any signs, and although a diagnosis of tubercle may eventually be made, a long wasting and cachectic period may persist before it is so determined. Where this miliary tubercle is suspected the eyes should always be examined, as the choroid is more often affected than has been generally supposed. The younger the child the quicker the dissemination, as in infants tuberculosis is much more of a blood disease, but after two years the above period of doubt may be considerable.

Under these circumstances where there is wasting we must always be on our guard against giving a negative opinion without much careful observation. A positive Von Pirquet reaction in such a case does not tell us much, especially if in an older child, but if negative after two applications it would be evidence against the disease existing. A more reliable method would, of course, be the injection of old tuberculin. Phthisis is regarded as being rare in childhood, so that we do not have its signs to assist us very often. At the same time it is not so rare as is generally stated, and I have three cases, 4, 6 and 8 years old, in the wards now under my care that I can show you presently. (*a*)

In a case of distended abdomen with wasting it is often hard to decide whether you have a case of tuberculosis or not unless the characteristic doughy feeling and the usual transverse bands or fluid are present; some assistance is often got by examining under an anæsthetic.

(3) *Congenital heart disease.*—Another disease which may have wasting as the most prominent sign is congenital heart disease, and if as often occurs there is no cyanosis or other such obvious sign it is apt to be overlooked, so that an abnormal condition revealed by the stethoscope and percussion may often be the key to a case of this sort. Babies with this disease may be hard to examine owing to much crying and the examination of the chest may be necessarily incomplete, but if a certainty cannot be arrived at at one examination, it should not be forgotten at the next. This defect in circulation makes the child more than usually liable to many disorders, and want of assimilation is often one of them, so that some of the best specimens of this defect arrive at the hospital for the treatment of wasting.

(4) *Empyema.*—Cases of wasting in this disease are usually where the child has had some lung attack, and has been ill ever since with an empyema that has not been discovered. It is a condition that is often difficult to prove, and hence should be carefully borne in mind.

Wasting Confounded with Nonpathological Thinness.

While searching for the causes of wasting, there are on the other hand cases where a child is abnormally thin or short of muscle (often being born of similar parents) without any pathological symptom or sign, and when he appears to be in perfect health and capable of as much as his stouter brethren. Similarly we get shortness of stature, which, however, may be pathological, as a case is given where a lad of sixteen who was too short for the Woolwich standard was induced to grow six inches in six months by the exhibition of thyroid extract.

(*a*) But see P. L. Sutherland, *British Medical Journal*, May 31st, 1913.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Professor E. Kermisson, M.D., Professor at the Faculty of Medicine at Paris. Subject: "Osteomyelitis in Infants."*

ORIGINAL PAPERS.

THE GIFTS OF SURGERY TO MEDICINE. (*a*)

By SIR BERKELEY MOYNIHAN, M.S., F.R.C.S.,

Professor of Clinical Surgery in the University of Leeds; Surgeon to the Leeds General Infirmary.

By a study of what I have ventured to call the "pathology of the living" a very profound change has by degrees crept over our knowledge of almost every form of chronic abdominal disorder.

In the earlier years of the nineteenth century an acquaintance with the morbid processes attacking internal organs was based upon two sources of information only—upon an inquiry into the details of the clinical history of any disease as it developed, waned, or progressed, and upon the examination of the parts involved after the death of the sufferer.

I have endeavoured to show, on more than one occasion, how impossible it is to measure the sufferings of patients during their lives, or to assess their chances of death from any disease, by a consideration of the statistics gathered from the *post-mortem* room experience. People do not die in hospital from the chronic diseases from which they suffer during life. It is, so far as the surgical side is concerned, the acute terminal infections, malignant disease in all its forms, especially those lending themselves to surgical consideration, and the accidents of civil life, that supply the bulk of the material upon which the pathologist makes his observations.

When the great gift of America to humanity—the discovery of the anæsthetic power of ether—was brought to the aid of the operator, vast possibilities were at once apparent in the range of the surgeon's work. But the dread of infection—indeed, the certainty of infection—held his hand for more than a generation, till the work of the greatest man our profession has ever produced, Lister, made the dream of the surgeon come true, made it possible for him with safety to carry through many procedures which before had been impossible.

The Appendix the Scapegoat.

As we began to recognise, almost unconsciously, the ease and sufficiency of the simple mode, the mortality from all operations fell rapidly. So it became a safe and customary procedure, not only to deal with the particular lesion which had demanded attention, but also to investigate the conditions of adjacent organs. And there surprising developments awaited the inquirer and rewarded his eager search. Conditions other than those which needed immediate attention were found to exist with no little frequency. In

---

(*a*) Abstract of the Address in Surgery delivered at the 81st Annual Meeting of the British Medical Association, held at Brighton, July, 1913.

diseases of the stomach or duodenum, the gall bladder was found not seldom implicated also; in diseases of the latter, as of the former, the vermiform appendix seemed often to play the part of an infecting agent. And so by slow degrees the conviction was borne in upon us that these diseases I have named did not stand in rigid isolation, one separate entirely from the other, but that their association was so frequent as to indicate the strong probability of some underlying primary cause. Infection, it was soon asserted, whether carried by the the blood stream, by the lymphatics, or ascending, as Bond has shown with great clearness, along the mucous canals, was the prime evil. Differences of opinion were soon declared, and still continue, as to the source of the infection. To many of us the quiescent inflammatory lesions of the appendix seem the most potent and the most persistent of all. Arbuthnot Lane, as I shall presently state more fully, holds firmly to the belief that the infections for the diseases I have named, as of many others, have their origin in the intestine, large or small.

The Reduction of Shock.

The perfect surgeon must have the "heart of a lion and the hand of a lady"; never the claws of a lion and the heart of a sheep. During any surgical operation, Crile assures us, there is, in reply to every incision, every pull of the retractors, indeed to every physical contact, a change in the pulse, the respiration, and the blood pressure. Every surgeon conversant with abdominal work knows how a rough handling will cause tension in the muscles and deepen the patient's breathing, making loud and stridulous the expiratory effort, as though the victim were groaning in his agony. No general anæsthetic, it is clear, can shelter the brain from the assault committed upon it by the injuries inflicted during an operation. Crile has therefore suggested that by means of local anæsthetics—novocaine for the skin, quinine and urea for the parietal peritoneum—a barrier can be erected around the area to be operated upon, so that no nerve impulses can be conveyed from the territory so isolated. The field of operation, that is to say, may be temporarily disconnected from the brain, not only at the time of operation, but for periods of one to five days subsequently. Shock may be produced not only by physical violence, but also by psychical disturbances, by emotional excitement, by the receipt, for example, of good or bad news or by fear, the suspense and the trials of some great ordeal. By many patients their submission to an operation is viewed with dread and apprehension. In order that the best results should follow upon our work it is necessary that every consideration should be shown to a patient, and every proper regard to his wishes; every encouragement should be offered, and the impression forced upon him that all those engaged in the operation or his after-treatment are working strenuously to the one end—his assured and rapid recovery. The fears which hover round the last hour before an operation are greatly modified by the administration of a small dose of morphine with scopolamine. A happy frame of mind is thereby induced, and very little nitrous oxide gas is required to put the patient soundly to sleep. The memory of the conveyance of the patient to the operation theatre and of the administration of the anæsthetic is often abolished by these measures. This is, in brief, the method of Crile, which I have used for many months, and which has added a pleasure to my work that is really immeasurable. To the great discoveries of Morton and of Lister this of Crile seems to be the fitting completion.

The Source of Gastric Ulceration.

There is now no longer any doubt in my own mind that the commonest site of a "gastric ulcer" is in the right iliac fossa. That is to say, that in the majority of cases in which the most erudite teaching of the most astute German physicians would justify or compel a diagnosis of ulcer, the patient is suffering from a lesion elsewhere, and more often than not from a lesion in the appendix. The appendix may present a variety of conditions, but they are all alike in one particular—they are all obstructive in character. Infection and obstruction together, or apart, as Sir Bertrand Dawson has well said, make all the ills from which a patient derives abdominal trouble. In the appendix both may be at work at the same moment, indeed, one follows inevitably upon the other. In my experience there is no appendicitis without obstruction. The present position of our opinion is accordingly this, that in many of the cases of "gastric ulcer," the symptoms of which are pain, flatulence, acidity, heartburn, vomiting, and hæmatemesis, the lesion primarily responsible for such symptoms does not lie in the stomach. The lesion is one in which infection and obstruction are in league to do harm, and its most frequent location is in the appendix.

The evidence seems to be increasing, and is, indeed, already abundant, in favour of the view that these distant infections, whether in the appendix or elsewhere, which often produce the gross lesions just described in the stomach may be the precursors and the excitants of a chronic ulcer of the stomach. Gastric ulcer, then, would appear to be almost always a secondary disorder; the primary fault lies not in the stomach, but elsewhere, its expression is manifest in the stomach because of the particular series of incidents which occur therein. This much is certain—that when cases of gastric ulcer come to the operation table the evidence of other and apparently older lesions is rarely wanting. Among the most notable of the gifts of surgery to medicine is the proof that in a large proportion of cases the onset of cancer of the stomach is not a new and unaccountable thing, but is, on the contrary, a tardy development upon an earlier condition which for years had clamoured for recognition. It appears to me that the work of the Mayo Clinic has offered irrefragable proof of this assertion. I am, of course, well aware that all cases of cancer of the stomach, unhappily, do not come to the surgeon. No one but the surgeon can do any good to patients so afflicted. Yet there is a strange timidity of approach to the surgeon which is unaccountable, and far too often the favourable period in the history of a case is allowed to slip away before any recognition of the real conditions is attempted. The infection, which has its origin in the appendix or in the intestine, wreaks other harm than that upon the stomach wall. Of duodenal ulcer and of cholelithiasis we have also learnt that they are usually secondary manifestations. Of duodenal ulcer I have so recently and so fully written that it is not necessary here to do more than record the fact that a full knowledge of its symptoms and course, and the power, unrivalled in any other abdominal disorders, of making an accurate diagnosis are not the least important of the gifts of surgery to medicine.

Cholelithiasis and Lesions of the Pancreas.

Every gall stone, as I have said before, is a tombstone erected to the evil memory of the germs that lie dead within it. The frequency with which gall stones lie inert within the gall bladder, causing no harm and arousing no symptoms, is so very small as to be quite negligible. It is certainly much less than 1 per cent. in all those cases which come for surgical treatment, and, though I admit that this estimate involves a possible fallacy, yet the truth cannot be known of all the cases in which gall stones exist, for neither operative work, nor the examinations of the dead, nor the records of the "spas" reveal the whole matter. The error that has found a place in the minds of all medical men, and has been faithfully carried down from one generation of textbooks to another—that in the majority of cases gall stones cause no symptoms—has been for ever dispelled by the work of the surgeon. In operating upon cases of advanced cholelithiasis a history of inveterate though perhaps trivial dyspepsia over a long period can almost always be obtained. In operating upon patients for the relief of other conditions—myoma of the uterus, ovarian or other pelvic conditions, appendicitis or ulcer in the stomach or duodenum—a routine examination of the gall bladder and kidneys should be made. Every now and again stones will be found in the gall bladder, and far more rarely in the kidneys. In the case of the former a clear history of dyspeptic troubles can, in my experience invariably, be obtained. It is true that these symptoms are not those which are commonly recognised as being due to a gall-bladder condition, but the gift of surgery to medicine consists here in the true portrayal of those clinical manifestations which only an examination of the living could disclose. We now know that the earliest symptoms, the "inaugural symptoms," of cholelithiasis are just as characteristic, just as certainly to be recognised, as those of the later sequels and avoidable complications. And more than this: the very little that was known of cholelithiasis in its clinical aspects has undergone a complete revision, with the result that we are often able to declare not only the presence of stones, but often the position of that which is causing the most serious trouble.

It is as an outcrop of the work of the surgeon on gall stones that all our modern knowledge of the clinical aspects of chronic pancreatitis has sprung. The acute form of pancreatitis was first recognised, and, with something nearly approaching to finality, described by one of the greatest of physicians—Dr. Fitz, of Boston. But of chronic inflammation, of stone, of cysts, and of the mimicries of cysts nothing was heard or known till the surgeon came bearing these gifts in his hands.

The question of chronic pancreatitis was first brought before the minds of surgeons by Riedel, who noticed that in many operations upon the biliary passages the pancreas was large, hard, and unduly firm. Little knowledge, however, sprung from this observation, until Mayo Robson, with his then unrivalled experience of cholelithiasis, showed the frequency and the clinical importance of pancreatitis, and convinced us all of its powers of mimicry both of carcinoma and of the calculous form of common duct obstruction.

Acute pancreatitis, so accurately described by Fitz, remained for long a desperate and often lethal disorder. The onset of the symptoms was so abrupt, their course so rapid, and the fatal event so precipitate that for many years surgeons were quite unable to realise the moment for swift intervention. When operation was undertaken it was generally upon the mistaken diagnosis of perforating ulcer of the stomach or duodenum. And it was not until Ramsay, in 1902, showed that the chief surgical indication here, as in the case of a phlegmon in the extremities, consisted in the relief of tension, that success began to attend the surgeon's efforts. Now it is a matter of very little difficulty to make an accurate and timely diagnosis of acute pancreatitis, and the recovery of the patient can generally be assured.

THE INFLUENCE OF INTESTINAL STASIS.

Among the most interesting and possibly one of the rich gifts of surgery to medicine is the hypothesis that intestinal stasis, with the associated condition of absorption of toxins, is responsible for many of the diseases which attack, not only the abdominal viscera, but even also parts remote therefrom. Perhaps no subject in medicine to-day has received more discussion, has been more bitterly assailed, more often attacked by derision rather than by argument, and more cheerfully supported than this. Its author, Arbuthnot Lane, is a man whose mind moves easily along new paths. He believes that the intestine itself is the factory in which the poisons are produced which cause, or make more easily possible, not only the various conditions I have named, but also such diverse and distant conditions as "rheumatoid arthritis," tuberculous diseases of bones and joints, diseases of the breast, cystic and malignant, of the thyroid gland, and many other conditions. At first it was supposed that the large intestine was the malefactor, and some slender support was possibly derived for the hypothesis from the work of Metchnikoff and others. More recently the delayed drainage of the small intestine has been held more blameworthy. The most exemplary instance of the effects of alimentary toxæmia occurs, perhaps, in the condition which may best be described as Lane's disease. The miserable chronic dyspeptic with sallow skin, dirty tongue, flaccid belly, offensive breath, dusky lips and nails, cold extremities, and constipation that is with some difficulty overcome, is restored to health with incredible rapidity when a short circuit is made between the ileum and the pelvic colon.

Medicine in its quest of knowledge may rightly levy a tribute from every other science with which it comes into contact. The experimental method, as a mode of inquiry, is not excelled in value by any other, and no experiments, I hold, can claim an equal rank with those which are a part of almost all surgical procedures. In every operation something may be learnt, not only of those disorders which call urgently for relief, but of other associated, or it may be separate, conditions which chance at the same moment to be present. The researches so carried out upon a human patient are performed with a sterner sense of responsibility and with a graver ritual, and are impressed by more relevant influences than attach to any other form of inquiry. Their results are accordingly of far higher value. Clinical research, when sedulously conducted and illumined by the disclosures made upon the operation table, afford the most accurate of all methods of investigation into the diseases by which man is attacked. The succour of an individual should mean also the taking of a step forward in the solution, or the better understanding of the manifold and perplexing problems of disease.

CHRONIC MEDIASTINITIS: ITS CAUSES, FORMS, SYMPTOMS AND TREATMENT.[1]

By Professor C. LIAN, M.D.,
Director of Clinical Medicine at the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

It is rather remarkable that in most text-books the only mediastinal diseases described are adenopathies and tumours, and nothing is said about chronic mediastinitis, although medical literature contains plenty of recorded cases to show that chronic inflammation of the mediastinum may exist without glandular enlargement, tumours or even pleural or pericardial lesions, giving rise to a distinctive clinical picture.

The principal factor in the causation of chronic mediastinitis is syphilis, and it is almost exclusively a tertiary manifestation. In nearly all the recorded cases it occurred in subjects whose attack of syphilis had been mild—so mild as to have escaped treatment—and in not a few it was associated with other syphilitic lesions of the mediastinum.

After syphilis, the commonest cause of chronic mediastinitis is tuberculosis. Authors do, indeed, refer to the occurrence of mediastinitis in connection with tuberculous tracheo-bronchial adenopathy, but seem to attach little importance thereto. Of course, it is often met with in connection with tuberculous cardiac symphysis, in chronic pericarditis and mediastinal pleurisy, but there are instances in which the symptoms are due exclusively to tuberculous mediastinitis. There is a third group of cases in which both these pathogenic influences are present, and then it is quasi-impossible to make out what share in the production of the symptoms is due to each of them respectively.

Among other rarer causes of mediastinitis are acute articular rheumatism, cancer of neighbouring organs, actinomycosis, and even traumatisms.

The symptoms of chronic mediastinitis vary according to the ætiology. Although the lesions are approximately the same no matter how caused—since the ultimate consequence is always more or less mediastinal sclerosis—the predilection of the particular agent for special mediastinal tissues, and the difference in the course according to origin, give a special cachet to the affection. I shall begin with syphilitic mediastinitis, since this is the most frequent and characteristic form, at any rate in the adult.

Pathological investigation shows that the lesions in syphilitic mediastinitis are not equally distributed throughout the mediastinum. The inferior form seems to belong more particularly to the tuberculosis, but even in the superior mediastinum the sclero-gummatous lesions tend to predominate in particular parts, entailing a different symptomatology according to the part attacked.

In most instances it is round the superior vena cava and its branches that the inflammatory process is localised, so that the syndrome of obliteration of that vessel is common in syphilitic mediastinitis. In other cases, the mediastinitis displays a tendency to surround the air passages constituting the respiratory form.

There are also cases in which the lesions are more extensive and give rise to almost the complete mediastinal syndrome. On the other hand, the mediastinitis may be more or less latent, revealing its presence merely by a few symptoms which are but rarely traced to their real cause.

Syphilitic Mediastinitis with Obliteration of the Superior Vena Cava.

The onset is usually slow and progressive. The patient complains of respiratory oppression, especially marked on effort, sometimes accompanied by distressing attacks of pain, with a sensation of precordial constriction and tachycardia. There is often obstinate headache, relieved by epistaxis which may be very free. One symptom is invariably present, *viz.*, when the patient stoops down to pick up an object the face becomes cyanosed and the patient experiences giddiness and noises in the ears.

Gradually the cyanosis becomes permanent, the face is puffy and the eyes are more prominent. The thorax, neck and upper limbs become œdematous, and at the same time the dyspnœa increases and the headache is more refractory. Sometimes, however, the onset is so sudden that all the symptoms may be present within a few hours.

At the stage of full development three symptoms attract our attention, all due to progressive obliteration of the superior vena cava, *viz.*, œdema limited to the upper part of the body, cyanosis and the presence of a well-marked network of subcutaneous veins.

The œdema almost always begins in the face, thence spreading to the neck, upper limbs (beginning in the hands), and, lastly, the thorax. It is not rare for this to proceed *per saltum*, as, for instance, after a violent attack of cough. The face is puffy, the features partly obliterated ; in fact, it gives one the impression of a fictitious obesity. The cheeks are widened, giving the head the shape of a pear The mucous membrane is infiltrated and the mouth is pasty. The neck is swollen, especially at its base. The supraclavicular hollows are the seat of an elastic resistant swelling. In the limbs the œdema soon becomes hard and no longer pits on pressure. The œdema may not be symmetrical. The front of the thorax and the breasts are œdematous, but seldom the back. This is easy to understand, seeing that the intercostal veins have a double current, determined by the position of the valves. One runs forward to the internal mammary, ending in the superior vena cava ; the other backwards, discharging into the azygos. Now the azygos system constitutes an anastomotic bridge between the superior and inferior venæ cavæ, so that the venous blood from the back of the thorax can pass directly into the inferior vena cava (*a*).

If the œdema persists we soon get actual pachydermia.

The cyanosis accompanying the œdema gives the latter a very special cachet. The face is bluish-red, especially the lips, nose and ears. The eyes are turgescent, prominent, and the ocular conjunctiva is injected and œdematous. The whole of the upper part of the body is of a slate-blue tint, which is in startling contrast with the normal lower half. The cyanosis is intensified by effort of any kind, especially when the patient bends forwards, backwards or sideways.

We now witness the rapid formation of a collateral circulation, especially on the thorax, where a network of blue veins forms. If this takes place suddenly, as it sometimes does, we may get veritable echymoses due to the rupture of small veins. The jugular veins are distended, and they may remain soft or be felt as a venous cord due to the extension of phlebitis from the vena cava.

The obliteration of the superior vena cava also determines other signs of circulatory disturbance, as, for instance, obstinate headache, dazzling, vertigo and noises in the ears. Sleep is agitated, unrefreshing, and all the signs of venous compression are increased in the horizontal position. The memory is impaired, and there is confusion of ideas or there may be a tendency to

---

(*a*) The azygos major has only one valve in its course, and this almost always insufficient.

coma or convulsions. Then, too, the dyspnœa becomes more pronounced and may be accompanied by attacks of suffocation and violent paroxysms of cough followed by blood-stained sputum. Apart from these little attacks of hæmoptysis from time to time the patient suffers from copious epistaxis, but tachycardia is the only manifestation of circulatory disturbance.

The general health remains fair, the temperature is normal, and, except for loss of appetite, the digestive apparatus is not hampered. The urinary secretion is apt to be scanty, and the urine may contain albumen.

All the symptoms enumerated above are consequent upon obliteration of the superior vena cava. The mediastinitis only manifests its existence by inconstant signs, very difficult to identify in the midst of the dramatic concomitants. This form may run on to a fatal termination, the dyspnœa becomes asphyxial, the nervous troubles are aggravated, and the patient succumbs to asphyxia or to coma or, it may be, suddenly expires in syncope.

The prognosis, however, is not always as gloomy as this, because the organism sometimes makes a gallant attempt to accommodate itself to altered conditions by the development of an anastomotic chain of subcutaneous veins between the two cavæ. Improvement is particularly rapid when antisyphilitic treatment has been early instituted, and may be very manifest within a fortnight. Otherwise it takes a month or two. Thereupon the symptoms become attenuated and the patient reaches the third stage.

The salient feature of the third stage is the complete establishment of the collateral circulation. Over the upper two-thirds of the front of the thorax, extending freely over the roots of the arms and the neck, even invading the lower part of the face, we see a thick, venous network, with meshes elongated vertically. From the lower part of this network run collecting trunks which communicate with veins belonging to the inferior vena cava system. Some of them go to the xyphoidal and umbilical veins. The others, as a rule two large trunks, run almost vertically to join the cutaneous branches of the inferior epigastric and especially the long cutaneous thoraco-epigastric vein.

This distribution suffices to distinguish the collateral circulation under consideration from any other. It is quite different from that of exclusive obstruction of the inferior vena cava, in which the dilated veins are mostly on the lateral walls of the abdomen and culminate almost exclusively in the axilla, and it can easily be differentiated from obstruction of the portal circulation, which is most marked over the insertion of the diaphragm and the pit of the stomach, in which the collecting trunks empty themselves in the axilla and the medio- and parasternal veins. It is not quite as easy to differentiate it from the collateral venous system in portal hypertension co-existent with obstruction of the inferior vena cava, because in that event there is dilatation of the subcutaneous veins both on the thorax and on the abdomen, but the dilated veins are at their maximum at the base of the thorax or on the abdomen and the blood current is from below upwards.

I dwell upon this collateral circulation because it is almost the only symptom of the third period of mediastinitis with obliteration of the superior vena cava. Side by side with the form associated with obliteration of the superior vena cava must be placed the one in which there is obliteration of one of the two brachio-cephalic trunk veins. The signs are the same but limited to one half of the upper part of the trunk. The collateral circulation in these cases is rather peculiar in that the veins form a rich network with *horizontal* meshes anastomosing freely with the veins of the arm, and the collecting trunks empty into the innominate veins of the trunk.

In other instances the respiratory disturbances are most in evidence. Commencing with dyspnœa, at first only after effort but subsequently becoming constant, this is dyspnœa of inspiration without any increase in the number of respiratory movements; there may be whistling or stertor, possibly even supra- and sub-sternal retraction. This dyspnœa is often accompanied by cyanosis, but no œdema. On physical examination we may find abolition of the vesicular murmur in contrast with the normal resonance of a lobe or of the whole lung. Should there be at the same time pressure on the recurrent nerves, we get vocal symptoms with attacks of suffocation which may rapidly become extremely grave. These cases are the more formidable seeing that, as a rule, there is not only compression of the air passages but also sclero-gummatous lesions of the walls of the air-passages.

Inferior syphilitic mediastinitis is uncommon, but it is mentioned by various authors, especially Hutinel. The inferior form is almost always consequent upon tuberculosis. There is also the extensive form which sets in with respiratory symptoms; intense dyspnœa, cyanosis and other signs of mediastinal compression. In a case reported by Dieulafoy the disease was ushered in by a series of minor signs pointing to interference with the circulation in the superior vena cava: headache, running at the eyes, vertigo, and dysphagia followed by dyspnœa and ultimately œdema, with the establishment of a collateral circulation and recurrent nerve symptoms. Antisyphilitic treatment is most efficacious in these cases, which would otherwise run a rapidly fatal course.

Abortive Forms.—Apart from the cases which run an acute course, there are many in which the mediastinal lesions are less extensive, or at any rate do not involve important mediastinal organs. The patient merely complains of a little effort dyspnœa, which nothing in his lungs or circulation seems to explain. He may have occasional attacks of retrosternal pain. In other cases there is only tachycardia or bradycardia of unknown origin. In a case under my care the only symptom was repeated glottic spasm. In other instances dysphagia or dysphonia is the only, or at any rate the principal, symptom, and this is extremely likely to be put down to aneurysm of the aorta. Lastly, there may be no particular functional symptoms, only more or less pronounced collateral circulation, testifying to circulatory embarrassment in the domain of the superior vena cava.

It is in these cases of abortive mediastinitis that we must look for the signs and symptoms peculiar to mediastinitis proper. Inspection may reveal pluricostal systolic retraction in the precordial region or below and outside the inferior angle of the scapula (Broadbent), though these are symptoms mostly met with in connection with mediastino-pericarditis. Percussion rarely yields much information, though it will sometimes show dulness outside the manubrium sterni or in the inter-scapulo-vertebral space. Among other signs observed by various authors are tracheal tugging (absent in three cases of my own), Kussmaul's pulsus paradoxus and inequality of arterial tension in the two radials when the patient is lying down, but disappearing in the erect position. All these signs are untrustworthy, and in these abortive forms we shall have to rely mainly on radiography in order to arrive at a diagnosis.

(*To be continued.*)

APEX-TREATMENT FOR PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.CANTAB., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

III.

"THE MACHINE, THE FUNCTIONS, AND THEIR CONSTANTS."

Should there be an Apex-treatment?—This would need no comment, were any blank less fatal. Consumption and death itself turn upon our behavour to the apex in its earliest trouble. Then, or never, is the time for simple means with great effects. Later the means are arduous; but meagre and slow the results. Our early tuberculosis has been treated so far by a general hygiene which is mainly atmospheric; but its local culture and the lung we have simply watched. Will the lesion remain closed, or is it going to open? That should be, not our "expectant" but our "active" concern. The worst is that, when after the failure of our expectant apex policy, we are moved to action by the advent of the dread open stage, we are still without any proposition as to the local management of the apex, which is now much more urgent and many times more difficult. It is true, that the rest we enforced was some form of treatment. The on-coming of the open stage in spite of it might mean that there had not been "enough" rest:—then why not "more" of it? But it is by no means less consistent to suppose that there might have been "too much" rest. "Who will decide?"—This echoes back: "Who will try?" But let us now pass to our third, all important question.

Can there be an Apex-treatment?—Many, perhaps; but very few of them simple and safe. Local "specific" immunisation by bacillary methods begs the question. It were no longer necessary if we knew the secret of a general immunisation against tuberculosis. That larger endeavour lies beyond our present clinical field. We can deal only indirectly with the infection, but much more directly with the lung; and it is in that direction that the discussion has lately shifted. The latest proposition in the Freund-Hart theory is that the phthinoid thorax is not "congenital," but itself the result of an early "infantile" tubercular blemish. This is not inconceivable as we are familiar with a converse transformation of the chest at a later age, when the drooping ribs of a "paralytic thorax" will rise and expand in abdominal plethora, or under strenuous muscular hygiene. This is a fresh hope added to our mechanical policy. As a fact, the "pulmonary" field is mechanical from end to end; in local predisposition and immunisation, in the localisation of tuberculosis, and in the local spread of the resulting phthisis, and also in the local indications for its treatment. We are still working exclusively under the formula, "The Seed, the Soil, and their Variations." We should now work under a second formula for less dilatory results: "The Machine, the Functions, and their Constants."

Can there be any "safe" Apex-treatment?—All disease, barring massive intoxications, slides from physiology into pathology. Consumption like the rest has its "physiological" zone, beyond which ingravescent pathology limits the possibilities and increases the dangers of treatment, till it rushes us into the heroic for rescue. How much less dangerous our artificial pneumothorax, if it were administered to a patient hardly yet impaired in strength, to a lung almost undiminished in its physiological efficiency, and with the reserve not of a tainted or suspected, but of an absolutely sound second lung! The same applies to the "pretubercular" and to the early "tubercular" use of tuberculin. Yet prudence witholds the syringe. Even then the risk is too great. Safety is not the characteristic of pathological remedies.

The safe remedy is the physiological one, applied at the physiological period. This points to our limited opportunities in range and in time. Late recovering consumptives are cured by their bacillus; some of them, too, we believe, by our tuberculin. Both reap the full benefit of their long specific immunisation. If that too precarious and wasteful benefit is to be forestalled, this can only be by the physiological pulmonary factor; which is mainly, so far as we can yet perceive, a mechanical factor, since we have reluctantly given up the hope of overpowering the bacillus with well-meant antiseptic inhalations, although these do not share the element of risk which belongs to the more drastic methods of the general "intravenous" antisepsis of Maguire and Dewar, or of the local intra-apical iodised injections of V. d'Amico (*a*).

Not inconsistently, formula I, the bacillary formula of variation, influences our treatment, and formula II., the physiological formula of constancy, rules our prevention. The disturbed physiology of disease is ever uncertain, and all sound treatment has to be variously planned to meet its unforeseen individual vagaries; but none the less under one unalterable law—that life itself is the true healer, and that heart, lung, and stomach, under the hegemony of the nervous system, have to work out the cure. We have broken up the idols of the pharmacopœia, but we cannot afford to be without the help which they symbolised, above all the help of Strychnine and of Digitalis handed down to us by Niemeyer, and of Oxygen which alone we have remembered. "The Trend of Modern Pharmacological Research" so lucidly traced out by Sir Wm. Whitla (*b*) brings us back to that primal allegiance, which is one of the missing arches for what we conceive to be the only "thorough treatment" of consumption; the other being the mechanical factor, centred upon perpetual cardio-pulmonary collaboration in the mechanism of life. Heart and lung are so linked that the one either pulls, or drags upon the other. Each breath we draw circulates the blood for the pumping heart; and the strength of the heart day by day governs the healing work of the lung for that day. In truth the heart is the dynamic centre of the cure: to be fostered from the first, constantly watched, and, if necessary, judiciously aided by any drugs such as strychnine, which can also help an overworked stomach and a depressed cerebro-spinal system.

(*a*) *Rivista*, vol. xx., cf. *Lancet*, vol. i., p. 910, 1913.
(*b*) *B. Med. J.*, May 31, 1913.

CLINICAL RECORDS.

INFLUENZA AND TYPHUS.

By EUSTACE THORP, L.R.C.S.Edin., D.P.H. Belf.

The recent epidemic of typhus fever in the west of Ireland illustrates the difficulty of differentiating these two diseases. Some of the cases, the earliest, were diagnosed as influenza and were admitted to hospital as such, and only when a typical case occurred was their real nature discovered. Other epidemics have progressed in the same way, the disease simulating influenza of a severe type. The question arises—what is influenza, has it any relation to typhus? The sporadic cases of the latter disease frequently appear during an influenza outbreak. Typhus has disappeared with the improvement of hygienic conditions, and the view might be held that influenza is a modified form of typhus occurring under these better conditions, but liable under certain insanitary conditions to revert to the malignant form, thus accounting for the sporadic cases. When such a case does appear it is not uncommon to find influenza present in the patient's family.

The more one studies the symptoms and sequelae of the two, the greater does the similarity become. Both are easily spread, and affect the very young and the very old chiefly, and in the latter the severity and mortality rate are heaviest on those suffering from complaints of the respiratory system. The prostration of the two diseases show another striking resemblance.

A combination of the so-called types of influenza would produce a disease strongly resembling typhus without rash, and patients suffering from influenza frequently show symptoms referable to two or all the types. The differential diagnosis between the two diseases—malignant influenza or typhus, may turn, and often does, upon the presence of a rash, yet true typhus, though prone to assume a septic condition, especially when epidemic and appearing under unfavourable circumstances, may run its whole course without petechial or any marked putrid condition. On the other hand, hybrid outbreaks of influenza are known, notably that reported from Hertfordshire, where rashes simulating typhus and scarlatina were found, while others resembled cerebro-spinal meningitis.

In children, as a rule, typhus pursues a mild course, rashes are often atypical, transient, missed, or absent, and it is possible that in the recent English epidemic amongst children there was a proportion of typhus cases. Overcrowding in a common atmosphere has long been recognised as disastrous in typhus, and more recent experience has shown this to be so in the case of influenza, as regards transmission of infection, intensification of type, and retardation of recovery. It is not too much to suppose that a form of illness like influenza might occur amongst those living under good hygienic conditions, whilst in bad surroundings a more severe type, such as typhus, might well be expected, this accounting for the fact that influenza more commonly attacks the well-to-do living normally under good hygienic conditions, whereas typhus almost invariably attacks those living under the worst possible conditions.

Bacteriologically Pfeiffer's bacillus is recognised as a causative organism in true influenza, but other organisms are found in types where the *B. influenzæ* is absent. No causative organism has as yet been identified for typhus, but evidence points to a minute germ.

Though not suggesting that the two diseases are one and the same, one's attention is drawn forcibly to the following facts:—As typhus has been eliminated, influenza has become more prevalent; typhus outbreaks frequently occur at the height of influenzal epidemics; influenza appears in hybrid forms; lastly, the two diseases present a strong resemblance in symptoms and sequelæ.

We must pause and reflect over their significance, considering the possibility of a relation existing between them, such as exists among the variolous group.

I have to thank Dr. W. R. MacDermott for information, drawn from his experiences in days when typhus was a more common disease.

OPERATING THEATRES.

HAMPSTEAD HOSPITAL.

Nine Operations for Hernia.

The following series of cases were operated upon by Mr. Jackson Clarke:—

Case 1.—Right Inguinal Hernia.—Man, æt. 48, furrier. Admitted November 20th, 1911; discharged December 17th, 1911. Feeling of weakness and lack of support in right groin. No swelling seen. Three months' history. *Operation.*—November 22nd; C.E—$CHCl_3$. Direct variety of hernia. Sac contained a lipoma and piece of omentum. Radical cure. Wound healed by first intention. Some post-operative bronchitis.

Case 2.—Left Inguinal Swelling.—Boy, æt. 11. Admitted May 1st, 1911; discharged May 25th, 1911. *Operation.*—May 3rd; C.E.—ether. Canal opened. No sac found. External oblique aponeurosis weak; strengthened with sutures. *Recovery.*—Uneventful. *Result.*—Cured.

Case 3.—Strangulated Right Inguinal Hernia.—Woman, æt. 44. Admitted April 7th, 1911; discharged May 1st, 1911. Two years' history of right inguinal hernia. Two days acute pain and vomiting. Hernia reduced by taxis on admission. *Operation.*—April 12th; C.E.—ether. Sac markedly thickened. Radical cure. Fascia covering pectineus stitched to Poupart's ligament as a precaution, although no signs of femoral hernia were present. Uneventful recovery.

Case 4.—Right Inguinal Hernia.—Man, æt. 43. Admitted May 29th, 1911; discharged June 28th, 1911. Radical cure five years previously at another hospital. On day of admission fell off the ladder of a dust cart. Hernia suddenly came down again on same side. Reduced on admission. *Operation.*—June 7th; C.E. Hernia cut down upon. Sac found to extend from external ring to conjoined tendon, and was much thickened. Portion of the bladder was found in sac. Radical cure performed. Wound healed by first intention. Some post-anæsthetic bronchitis.

Case 5.—Strangulated Femoral Hernia.—Woman, æt. 78. Admitted March 7th, 1911; discharged April 1st, 1911. History of two days' vomiting; Stercoraceous on admission. Bowels not open four days. Tenderness and pain over the right femoral hernia, the size of a pigeon's egg. *Operation.*—On admission; $CHCl_3$—CE—ether. Incision over mass. Sac contained dark, cherry-coloured bowel, which bled. Hernia director inserted and constricting band divided. Radical cure. Uneventful recovery.

Case 6.—Strangulated Inguinal Hernia.—Man, æt. 52. Admitted March 28th, 1911; discharged April 5th, 1911. Twenty-four hours' history of painful swelling in scrotum. Bowels open, with traces of blood. No vomiting. Vomited eight times after admission; stercoraceous. Strangulated inguinal scrotal hernia on left side. Phimosis. *Operation.*—March 29; C.E. Incision over swelling. Sac contained cherry-coloured small intestine. Left testicle swollen, black and gangrenous. Constriction divided and bowel returned. Sac not ligatured. Left testicle removed. Canal sewn up. Circumcision. Rapid and uneventful recovery.

Case 7.—Strangulated Right Inguinal Hernia: Left Inguinal Hernia: Bilateral Varicocele.—Man, æt. 38, caretaker. Admitted April 23rd, 1911; discharged June 13th, 1911. Four years' history of right inguinal hernia, reducible; 36 hours' strangulation. Duration of left inguinal hernia and bilateral varicocele not mentioned. Temperature, 99°; pulse, 78. *First operation.*—On admission; C.E.—ether. Herniotomy and radical cure. Sac had a very broad base and contained some blood and tightly nipped bowel, showing some ulceration. The varicocele was very large and among the veins. No spermatic artery found. Large external ring. Excision of veins of pampiniform plexus on same side. *After-result.*—Slight bronchitis of short duration. Some serous, cloudy exudation from upper part of wound. *Second operation.*—May 10th; C.E.—ether. Radical cure on left side, and large varicocele radically cured. May 13th, gangrene of scrotum discovered (? which side). Right inguinal wound still oozing. Cellulitis of left groin. *Third operation.*—C.E.—ether. Scrotum and groin opened up freely. Right testis removed. Transferred to isolation. Four-hourly irrigation *c* iodine solution in water, dr. 1 ad oj. Satisfactory progress was made subsequently. The healing of the gaping wound in the left groin was hastened by a tension suture. Patient left hospital in good health with a granulating wound no bigger than a shilling piece.

Case 8.—Strangulated Umbilical Hernia.—Man, æt. 58, caterer. Admitted July 3rd, 1911; died July 16th, 1911. Four years' history of reducible umbilical hernia. First became irreducible three days ago. No vomiting. Constipation. Temperature, 99°; pulse, 110. *Operation.*—On admission; ether. Large hernia. Sac contained a large loop from the upper, and a smaller one from the lower, part of the small intestine. All contents of sac gangrenous. Upper loop resected, and union effected by a Murphy's button. The lower loop, after resection, was closed by a lateral anastomosis. Following day fæcal vomiting commenced. *Second operation.* July 5th; C.E. Murphy's button removed and replaced by a lateral anastomosis. Patient died the next day.

Case 9.—Strangulated Right Inguinal Hernia.—Man, æt. 64, bricklayer. Admitted May 20th, 1911; discharged June 30th, 1911. Right inguinal hernia (reducible) for many years; strangulated twelve hours. *Operation.*—On admission. Temperature, 97.6°; pulse, 60. Hernia cut down upon. A large mass of bowel in the sac, and surrounding parts very œdematous. Peritoneum covering of intestines congested, but fit to be returned to abdomen. Fourteen days afterward patient complained of severe pain, and it was found that hernia was down again and irreducible. Mr. Thomson Walker operated, and found that the appendix and part of the cæcum had come down, and that there was no sac covering them. Tissues very œdematous. Pus along track of old wound deep down. Discharged with a truss in a satisfactory condition. He had a hernia on the left side which it was considered inadvisable to operate upon, as patient was a fat man with a troublesome chest when kept lying in the prone position.

In his comments on the cases Mr. Jackson Clarke said:—From among a series of abdominal cases (*a*) I have chosen some that illustrate common hernias. In Case 1 it will be noted that the hernia was of the direct variety. Among the many hernias I have operated on in the past five years quite a number have been of this kind—one in a child. In Case 2 there was no hernia, strictly speaking, but only a cleavage in the fibres of the external oblique leading to a bulging of the abdominal wall. Case 3 reminds one that inguinal hernias are quite common in women. After operating on the inguinal hernia, provision was made against the occurrence of a femoral hernia subsequently. Case 4: The term "radical cure" means Bassini's operation in these notes, unless otherwise stated. A thickened bladder may easily be exposed in the operation for inguinal hernia without its being herniated, but in this case there was a distinct hernia of a portion of the bladder. Case 5: Here the condition of the bowel was serious, also the general state of the patient, but in spite of her age she recovered rapidly. It is important to examine the part of the bowel actually nipped to see that it is not necrotic before returning such intestine to the abdomen. Case 6 is similar to Case 5. Case 7 was a combination of badly strangulated hernia with a varicose state of the scrotal veins and a varicocele of unusually large dimensions. The events subsequent to the first operation called for and received prompt and extensive secondary measures. Case 8 shows the importance of having umbilical herniæ surgically treated before they become past all help: in this instance the patient was given the only chance. Case 9 shows how a constant cough may cause troublesome complications after an operation for hernia. I have to thank my colleague, Mr. Thomas Walker, for coming to the rescue in my absence.

(*Comments on cases published July 23rd.*)

Mr. Jackson Clarke said that he would refer to the prostatic case first, having been recently reminded of this case by the patient coming to report himself. The tumours after removal strongly recalled uterine myomata, but microscopic examination proved them to be adenomata. The patient had remained perfectly free from urinary symptoms during the three years that had elapsed since the operation, and in the interval had been in the hospital for operation on a large inguinal hernia, the result of which had been as satisfactory as that for the prostatic condition. The case offers a practical lesson to those who are about to operate on what seems like a typical general enlargement of the prostate: if enucleation should prove to be difficult, do not persist until an examination by palpation and inspection, either direct or by a speculum inserted into the supra-pubic wound, has excluded the condition here described. With regard to the case of abdominal adhesions and gangrenous gut, the peritoneum being infected and the pelvic cavity full of septic fluid, drainage was clearly indicated, and the happy issue of the case vindicated the rather lengthy period during which the drainage was kept up. A large rubber tube, with a strand of ribbon gauze lying loosely within it, was used at first, the gauze being changed and the contents of the tube being aspirated twice a day. After the 4th day a small quantity of a lotion made by adding a drachm of Tr. Iodi to a pint of saline solution is run into and sucked out of the tube several times; the outer end of the tube is covered by a dressing of cyanide gauze passed through 1/40 carbolic. At the end of a week the large tube is changed for a smaller one. With these precautions the risk of a tube keeping up instead of removing infection is obviated.

The case of tubal pregnancy is a typical one of its class. Case 3: The short-circuiting operation was only a palliative measure. It was effected by lateral anastomosis and gave great relief to the patient. Case 4: This is a brief record of serious and complex lesions. The word "cholecystectomy" is a clerical error. The natural opening in the gall-bladder was only enlarged and a drain inserted. The stone which caused the perforation had evidently escaped during the attack of pain, which appears to have simulated renal colic. Case 5 is interesting as an instance of a retro-peritoneal perforation of the duodenum. The note "Fluid escaping from second part of the duodenum" refers to my observation during the operation of a dark-green, diffuse, retro-peritoneal infiltration around the second part of the duodenum. In making the posterior drainage track the second part of the duodenum was lifted from the kidney.

At Acton Cottage Hospital the other day Dr. E. W. Lowry and Dr. F. W. James, late Chairman and Secretary respectively of the Ealing Division of the British Medical Association, were presented with silver salvers by "some members of the medical profession resident in the Ealing Divsion of the British Medical Association, in appreciation of their strenuous work during the crisis of 1913."

(*a*) Reported for me from the Hospital Notes by Mr. V. C. [illegible]el.

SPECIAL REPORTS.

THE EIGHTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT BRIGHTON, 1913.

[By Our Special Representative.]

THIRD ARTICLE.

THE WORK OF THE SECTIONS.

Section of Bacteriology and Pathology.

An interesting paper was read on the Wednesday by Mr. Rupert Farrant (London) on "Hyperthyroidism," chiefly from the experimental standpoint. Drs. E. T. McWeeney, W. M. Crofton, and H. F. Moore presented a paper on "Paratyphoid Infection," in two cases of which vaccines had been used with success. An excellent demonstration was given by Dr. v. Wasielewsky (Heidelberg) on the different types of amœbæ. Dr. Miller Galt (Brighton) read a paper on "The Value of Blood Counts in Diagnosis." On the following morning a joint discussion took place with the Section of Pharmacology, Therapeutics and Dietetics on "Anaphylaxis" which was opened by Prof. W. E. Dixon, followed by Prof. G. Sims Woodhead, "General Pathological Aspects"; Drs. Thiele and Embleton, "Special Bacteriological Aspects"; E. W. Goodall, "Clinical Aspects"; H. H. Dale, "General Experimental Point of View." The last day was occupied with papers by the Staff of the John Howard McFadden Research Fund on "The Jelly Method of Staining Cells Alive," and by Dr. R. M. Buchanan (Glasgow) on "*Empusa Muscæ* as a Trajector of Bacterial Infection," among others.

Section of Climatology and Balneology.

Dr. W. J. Tyson (Folkestone) opened a discussion on the first day on sea bathing, which was considered in a comprehensive manner and, as might be expected, the remarks of the speakers upon this subject were freely quoted in the lay Press. On the Thursday, Dr. Neville Wood introduced the subject of the international aspect of health resorts, followed by Dr. W. Gordon (Exeter), Dr. F. T. Paley, the President (Hove), Dr. D. D. Brown (Harrogate), and others. Several interesting papers were read the following day, including one by Dr. H. de Carle Woodcock on "Tuberculosis from the Climatological Point of View"; Notes on Egypt and the Nile as a health resort, by Mr. Shepherd Boyd; and "Massage in Fibrositis and Other Painful Affections," by Dr. R. Ackerley.

Section of Dermatology.

In his opening remarks, the President, Dr. J. H. Sequeira, referred to the action taken by Sir Malcolm Morris in initiating a movement for a Royal Commission to inquire into the treatment and prevention of venereal disease, and expressed his admiration of the courage shown by certain newspapers in publishing a letter on the subject signed by 40 leading British medical men. Sir Malcolm Morris, who also spoke, emphasised the mistaken character of a policy which forbade the mention of such matters in the public Press. He said England was behind other countries in the prevention and public treatment of these diseases, and reiterated the demand for a Royal Commission. A discussion was then opened by Dr. H. G. Adamson (London) on the fungous affections of the glabrous skin, illustrated by lantern slides, followed by Prof. Alfred Bolam (Newcastle), Dr. G. Pernet (London), and others. On the following day a discussion on the nature, causes, and treatment of lupus erythematosus was opened by Dr. J. M. H. McLeod (London), followed by Prof. A. Bolam, Dr. Alfred Eddowes (London), Sir Malcolm Morris, R.C.V.O., Dr. Holdin Davis (London), Dr. Pernet, and Dr. A. W. Williams (Brighton). A paper was then read by Dr. Norman Meachen (London), on "The Treatment of Tuberculosis of the Skin by Means of Copper." The last morning was occupied with several interesting papers. Dr. J. L. Bunch (London) read one on "The Treatment of Skin Diseases by Solid Carbon Dioxide"; Dr. David Walsh (London), "Circulatory Disorders in Relation to Alopecia Areata and Other Forms of Baldness"; Dr. F. Gardiner (Edinburgh), on "A Case of Acne Necrotica"; Dr. Haldin Davis, on "Ointments"; Dr. A. W. Williams, on "The Treatment of Chronic Ulcer of the Leg"; Dr. S. E. Dore (London), "The Use and Action of X-rays in Psoriasis and Other Skin Diseases"; and Dr. L. T. Hobson, on "The Treatment of Common Skin Diseases at the Harrogate Spa." A number of interesting cases were shown before the meetings.

Section of Diseases of Children, Including Orthopædics.

Dr. F. J. Poynton (London) introduced a discussion on the Wednesday on "Affections of the Heart in Childhood," followed by Dr. Carey Coombs (Bristol), Dr. Chaffey (Hove), Dr. Mary Murdoch (Hull), Dr. R. Miller (London), Dr. W. P. S. Branson (London), and Dr. Naish (Sheffield). Dr. J. H. Nicoll (Glasgow) then read a paper on "The Surgery of Childhood," a plea for the more extensive use of the outpatient department for operations on children. On the Thursday, Mr. T. Openshaw, C.M.G., opened a discussion on "The Choice of Methods in Dealing with Paralytic Deformities in Children," followed by Prof. Foerster (Breslau), and Messrs. Robert Jones (Liverpool), Edred Corner, Laming Evans, F. W. Goyder, Kellett Smith, R. Ollerenshaw, and others. The concluding session was occupied by the discussion on "The Diagnosis and Treatment of Acute Inflammatory Affections of the Abdomen in Children," opened by Mr. C. B. Lockwood, and a paper by Mr. Blundell Bankart on "The Treatment of Poliomyelitis."

Section of Electro-therapeutics.

Dr. W. Deane Butcher, the President, introduced Prof. C. G. Barkla, of King's College, London, who delivered an address on the subject of "Secondary X-ray Radiations in Medicine." Dr. A. F. Hertz (London) next read a paper on "Suggested Normal Standards of the X-ray Examination of the Alimentary Canal." Other papers were by Dr. Ironside Bruce on "Collargol Injections in the Diagnosis of Diseases of the Urinary Tract"; by Dr. A. C. Jordan on "Cardiospasm"; and by Dr. Reginald Morton on "The Present Position of the X-ray Diagnosis of Pulmonary Tuberculosis." On Thursday there were numerous papers, including one by Dr. Lewis Jones on "The Use of Condensers in Electrical Treatment"; Dr. C. F. Bailey, on "Electro-therapeutics in Neuron Lesions"; Dr. J. D. Harris on "Secondary X-rays in Connection with Ionisation." A discussion was opened on Friday on "The Use of the Gamma Radiations in Surgery," opened by Sir A. Pearce Gould and Dr. Robert Abbe (New York). Prof. Gauss (Freiburg) read a paper before a joint meeting of this section and that of Gynæcology on "The Radio-therapeutic Treatment of Gynæcological Cases at Freiburg." Other interesting papers closed the day's proceedings.

Section of Gynæcology and Obstetrics.

On the Wednesday a discussion was opened by Mrs. Scharlieb (London) on the best methods of dealing with malpositions of the uterus, with special reference to retro-displacements and prolapse, followed by Dr. Hans Schlimpert (Freiburg) and Professor Corby, M.D. (Cork), Dr. A. E. Giles (London), Mr. Christopher Martin (Birmingham), Mr. Cuthbert Lockyer (London), Miss Frances Ivens (Liverpool). Dr. W. Ritchie (Glasgow), and Dr. R. Dickinson (New York). The next day's proceedings opened with a discussion on affections of the urinary tract, complicating pregnancy, introduced by Sir J. Halliday Croom, followed by Drs. H. Williamson, H. O. Nicholson, W. H. P. Newnham, and Messrs. F. Edge, Bryden, Glendining, and Child. On Friday, Dr. A. E. Giles read a paper on "Reasons for Early Operation on Uterine Fibroids," followed by a conjoint paper on "The Significance of the Wassermann Reaction in Gynæcological Diagnosis," by Drs. A. L. McIlroy, H. F. Watson, and J. H. McIlroy. Dr. Hans Schlimpert contributed a paper on "Aberhalden's Serum Reaction of Pregnancy."

Section of Laryngology, Rhinology, and Otology.

A discussion was opened on the first day by Dr.

W. Milligan on the *technique* and after-treatment of the radical mastoid operation, followed by Dr. Dundas Grant, Sir R. Wood, Dr. Jobson Horne, Dr. Watson-Williams, Dr. Wyllie, Dr. Syme-Mackay, Dr. Sydenham, and Dr. Davis. Mr. Herbert Tilley and Sir R. Wood opened a discussion next morning on the care of patients after operations on the nose and nasopharynx. Dr. P. Watson-Williams gave a demonstration at the Brighton Throat and Ear Hospital on exploration of the accessory sinuses of the nose. Professor Owen Richards (Cairo) contributed a paper upon "Rhino-scleroma." Dr. W. Hill demonstrated a new form of oro-tracheal catheter for administering anæsthetics without admission of blood to the air-passages. The concluding session was occupied by papers by Drs. A. Maurice (Paris) and H. Humphris on "The Re-education of the Powers of Hearing." Mr. J. F. O'Malley read a paper on "Suggestive Points of Analogy in Oto-Sclerosis and Arthritis Deformans." Mr. G. Seccombe Hett discussed the physiology, anatomy, and embryology of the polatine tonsils, and Dr. Jobson Horne was heard on tumours of the ventricle of the larynx.

SECTION OF MEDICAL SOCIOLOGY.

This section was the largest attended of all, and at the opening meeting on the Wednesday, after some introductory remarks by the President, Dr. R. J. Ryle, M.A., J.P. (Brighton), a discussion on eugenics was introduced by Mr. Edgar Schuster, M.A., B.Sc., the first Galton Research Scholar, followed by Dr. Harry Campbell, who pointed out that it was not at present advisable to put any legal restraint upon biologically right marriages: it was better to rely upon the individual eugenistic conscience, which should be carefully fostered in the race. He was followed by Dr. Stewart Mackintosh, Mr. F. J. Lidbetter, Sir James Barr, Miss A. H. P. Kirby, Dr. Dunlop, Prince Kropotkin, Dr. C. V. Drysdale, Dr. C. Saleeby, Mgr. Canon Johnston (Brighton), Dr. Wynne (Wigan), Dr. Ernest Wood, and Mrs. Arthur C. Gotto. On the next day the subject of crime and punishment was discussed, the principal speakers being Dr. James Scott (late Governor of Holloway Prison), Dr. C. A. Mercier, Sir H. Bryan Donkin, Mr. A. O. Jennings, LL.B. (Brighton), the Rev. C. B. Simpson, M.A., Prince Kropotkin, and Captain A. St. John. A resolution was adopted to the effect "that it be recommended to the Council of the Association to appoint a Committee of Members of the Association, with power to co-opt others who are not members of the medical profession to consider the present state of the law with regard to the legal responsibility for crime, and to issue a Report with recommendations to the Council." On the Friday, Prof. Benjamin Moore, M.A., D.Sc., F.R.S., introduced the subject of "Hospitals in Relation to the State, the Public, and the Medical Profession"; followed by Dr. J. G. Gibbon on "The Municipal Hospital in Germany," Prof. Dr. W. Pfeiffer (Essen), Dr. Med. Adolf Gottstein (Charlottenburg), Prof. Dr. Grober (Jena), Dr. Christopher Addison, M.P., Sir Henry Burdett, K.C.B., Mr. C. A. Parker, and Mr. W. P. Wright.

SECTION OF MEDICINE.

A discussion was opened on the first day on "Non-Diabetic Glycosuria," by Dr. A. E. Garrod, F.R.S., who pointed out that the tendency of modern research was to strengthen the belief in the internal secretion of the pancreas as being the chief factor in the control of carbohydrate metabolism. He was followed by Drs. Robert Hutchison, Aldren Turner, P. J. Cammidge, J. F. Gordon Dill (Hove), W. Essex Wynter, E. W. Blackburn, and the President, Dr. E. Hobhouse (Hove). On the second day, Dr. A. P. Luff opened a discussion on "Fibrositis and Muscular Rheumatism," followed by Drs. F. H. Humphries, A. Morison, C. F. Bailey (Brighton), W. M. Crofton (Dublin), Preston King (Bath), Marion Gilchrist (Glasgow), George Parker (Bristol), A. A. Warden (Paris), and W. Langdon Brown. The last day was occupied by the reading of a paper by Dr. Murdoch MacKinnon (London) on "Arterial Pressure in Thoracic Aneurysm," and Dr. Walter Broadbent (Brighton) contributed a paper on "The Heart as Affected by the Stomach," while Dr. Preston King read a paper on "Differentiation in Chronic Joint Affections."

SECTION OF NAVY, ARMY, AND AMBULANCE.

The President, Col. J. Turton, V.D., F.R.C.S. (Brighton), gave first a short account of the relation existing between the Voluntary Aid Detachments and the medical organisation of the Territorial Force. Major Birrell, R.A.M.C., then read a paper on "Notes on the Work of a British Red Cross Unit with the Bulgarians." Lieut.-Col. Donegan described the relation and utility of the various types of aeroplanes in connection with medical service in the field. On the Thursday, Dr. Louis Durey, French Army Service, read a paper on "The Use of Kinesitherapy in the After Treatment of Injuries Received in War." Other papers were those by Lieut. D. G. Kennard, R.A.M.C. (T.F.) on "A Proposed Light Ambulance for Yeomanry Regiments," and by Major J. W. Houghton, R.A.M.C., on "Spinal Analgesia in Military Service."

SECTION OF NEUROLOGY AND PSYCHOLOGICAL MEDICINE.

On the Wednesday, Sir George Savage opened a discussion on "Sleep and the Treatment of Sleeplessness," in which Drs. W. H. Butler Stoddart, C. Hubert Bond, Constance E. Long, J. R. Lord, and D. G. Thompson took part. The next day was occupied in a discussion on "The Significance and Treatment of Vertigo," which was opened by Dr. J. S. Risien Russell, followed by Drs. Broadbury (Cambridge), H. Campbell, Prof. E. D. Fisher (New York), Helen Boyle (Brighton), L. Guthrie, A. Mackintosh, Aldren Turner, C. Russell, T. Williams, and others. On the Friday, Dr. Tom Williams (Washington) read the first paper on "Some Truths and Fallacies about Mental Healing," followed by Dr. R. J. Anderson on "Some Aspects of Reflex Action in Man and the Lower Animals." Dr. M. D. Eder dealt with "The Present Position of Psycho-analysis," while Dr. Hugh Wingfield spoke on "Suggestion in the Treatment of Alcoholism."

SECTION OF OPHTHALMOLOGY.

On the first day Mr. J. Hern (Darlington) read a paper on "School Clinics and the Prevention of Myopia." He was followed by Mr. A. F. MacCallan (Cairo) on "Ophthalmic School Clinics in Egypt," and in the discussion which followed, Dr. E. Maddox (Bournemouth), Dr. T. Harrison Butler (Coventry), Dr. J. A. Wilson (Glasgow), Mr. N. Bishop Harman (London), Prof. T. E. Weeks (New York), Prof. R. A. Reeve (Toronto), Mr. J. H. Parsons (London), Lieut.-Col. R. H. Elliot, I.M.S., Dr. W. B. Inglis Pollock (Glasgow) took part. Other papers followed by Dr. Maddox and Dr. T. A. Wilson. On the Thursday, a discussion was opened by Dr. T. Harrison Butler on "The Treatment of Chronic Dacryocystitis." Dr. F. W. Edridge-Green (London) read a paper on "A Criticism of the Board of Trade Eyesight Tests," and moved a resolution, "That the sight tests of the Board of Trade are not satisfactory, and that an inquiry is urgently needed in the interests of the mercantile marine and of the nation." This was seconded by Mr. Devereux Marshall, and carried with one dissentient. Dr. Inglis Pollock followed with a paper on "The Persistence of the Nerve Plexus of the Iris after Excision of the Ciliary Ganglion and of the Superior Cervical Ganglion." The last day was occupied with a discussion on the question of "Excision in Cases of Injury to the Eye," by Mr. M. L. Hepburn (London) followed by Mr. R. Affleck Greeves, Mr. Bishop Harman, Dr. Maddox, and others. Mr. S. H. Browning (London) read a paper on "The Blood Conditions in Sympathetic Disease." Other papers by Drs. MacCallan and Harrison Butler concluded the work of the section.

SECTION OF PHARMACOLOGY, THERAPEUTICS, AND DIETETICS.

The proceedings opened with a paper by Dr. H. Gray Barbour (University of Yale) on "The Pharmacology of Body Temperature." A discussion then followed on "Urinary Antiseptics," introduced by Mr. J. W. Thompson-Walker (London), followed by

Prof. Bradbury and Mr. A. R. Jordan. On the Thursday, there was a discussion on "Anaphylaxis," opened by Prof. W. E. Dixon, which was held conjointly with the Section of Bacteriology and Pathology. Dr. F. W. Pierce read a paper on "A Further Investigation of the Action of Digitalis on the Blood Pressure in Man." On the last day, Dr. H. F. Winslow read a paper on "Some Errors in Dietetics." A discussion ensued on "The Use and Abuse of Hypnotics," introduced by Dr. W. H. Willcox, followed by Dr. M. Craig, Gray Barbour, and Dr. J. C. Uhthoff (Hove). Other papers followed by Dr. A. Haig and Dr. C. Mathu.

Section of State Medicine.

Dr. H. O. West (Maidstone) opened a discussion on "The Prevention and Treatment of Tuberculosis," followed by Drs. A. Serrell Cooke, Duncan Forbes (M.O.H., Brighton), J. MacKeith, R. Murray Leslie, A. Griffith, W. A. Bond, W. Ewart, and J. C. McWalter (Dublin). The resolution was passed:—"That this Section of State Medicine recommends to the Council of the British Medical Association that representation should be made to the Government that in cases of tuberculosis receiving sanatorium benefit, the sickness benefit provided should not lapse at the end of six months, but should continue so long as the patient is, in the opinion of the medical adviser to the Insurance Committee, unfit for work." On the Thursday, Dr. Herbert Williams (M.O.H., Port of London) introduced a discussion on "Port Sanitary Administration, More Especially with a View to the Prevention of the Introduction of Diseases." He was followed by Major R. W. H. Jackson, R.A.M.C., Dr. F. A. Foy (Rangoon), and Mr. Gilbert E. Brooke (Singapore). Dr. Foy then read a paper on "Deratisation in the Port of Rangoon." The last day was occupied by a discussion on "The Need for Popular Education in Matters Affecting the Public Health," introduced by the President, Dr. E. W. Hope (Liverpool), followed by Prof. H. R. Kenwood (London), Dr. T. A. Williams (Washington), Dr. R. Murray Leslie (London), Dr. Wynne (Wigan), and Dr. J. C. McWalter (London). On the motion of Dr. Hope, seconded by Dr. Murray Leslie, the following resolution was unanimously adopted:—"That a recommendation be forwarded to the Council of the B.M.A., endorsing the views expressed in the circular letter recently issued to the metropolitan public Press by recognised leaders of the medical profession in regard to the question of venereal disease, and strongly recommending the appointment of a Royal Commission to inquire into this subject, which so closely affects the public health."

Section of Surgery.

A discussion was opened on the Wednesday, by Mr. G. H. Makins (London) on "The Diagnosis and Treatment of Carcinoma of the Stomach," followed by Mr. E. W. Hey Groves (Bristol), Dr. T. R. Dalziel (Glasgow), Mr. A. H. Buck (Brighton), Mr. W. McAdam Eccles (London), and Mr. H. B. Robinson (London). Mr. D. P. D. Wilkie read a paper on "Experimental Observations on the Cause of Death in Acute Intestinal Obstruction." A paper was also contributed by Dr. A. A. Warden (Paris) on "Radium and Inoperable Cancer." On the Thursday, a discussion on "The Diagnosis and Treatment of Injuries of the Knee-Joint Other than Fractures and Dislocations" was introduced by Mr. A. M. Martin (Newcastle-on-Tyne), in which Messrs. A. J. Walton (London), R. H. A. Whitlocke (Oxford), Hey Groves, Dalziel, E. F. Finch (Sheffield), J. M. Cotterill (Edinburgh), McAdam Eccles, A. C. T. Woodward (London), and the President, Mr. W. Thelwall Thomas, F.R.C.S. (Liverpool) took part. Mr. Hey Groves read a paper on "The Operative Treatment of Compound and Comminuted Fractures," and Dr. Dalziel contributed one on "Chronic Enteritis." The last day was occupied with papers by Mr. H. Wade (Edinburgh), on "Prostatism, the Pathological Basis of the Operative Treatment"; by Dr. Dalziel, on "Neuralgia of the Twelfth Dorsal Nerve Simulating Visceral Lesions"; by Mr. Herbert J. Paterson (London) on "The Surgical Treatment of Intestinal Stasis"; and by Mr. C. P. Childe (Southsea) on "A Case of Retroperitoneal Fibroma, 34¾ lbs. in weight, Successfully Removed."

Section of Tropical Medicine.

The proceedings opened by a discussion on "The Causes of Invaliding in the Tropics," introduced by Dr. G. Basil Price (London) who had made a statistical investigation into the subject. He was followed by Col. R. J. S. Simpson, A.M.S. (ret.), Dr. W. F. Law (British Guiana), Dr. C. F. Harford (Livingstone College, Leyton), Dr. G. Duncan Whyte (Swatow), Major W. S. Harrison, R.A.M.C. (London), Dr. Malcolm Watson (Federated Malay States), and Dr. M. Cameron Blair (Northern Nigeria). Mr. J. Cantlie (London) described "A Series of Observations on Sprue." On the Thursday, several important and interesting papers were read on "Dysentery," the subject being introduced by Capt. S. R. Douglas, I.M.S. (ret.), followed by Messrs. J. Graham Willmore and H. Savage (Egypt) on "The Effects of the Serum Treatment of the Bacillary Form of the Disease." Dr. C. M. Wenyon (London School of Tropical Medicine) described "The Morphology of the Intestinal Amœbæ." After a discussion thereupon, in which many members took part, the Section adjourned to the Museum, where Prof. v. Wasielewski, of Heidelberg, demonstrated the various types of the organism. On the Friday, a discussion on "Filariasis" was opened by Dr. G. C. Low, of the Tropical Diseases Bureau, London, and Dr. Bahr demonstrated filaria in the Museum. Lieut.-Col. Cecil Birt, R.A.M.C., read a paper on "Dengue and Phlebotomus Fever."

(*To be concluded.*)

INTERNATIONAL MEDICAL CONGRESS.

THE HISTORICAL MEDICAL MUSEUM.

FIRST NOTICE.

One of the most interesting features of the International Congress of Medicine will be the Historical Medical Museum, organised by Mr. Henry S. Wellcome. The collection he has brought together is officially connected with the Congress Section of the History of Medicine. Situated in spacious quarters in Wigmore Street, it presents a veritable mine of interest for all philosophic students of the past, but more especially for those who are also members of the medical profession. Entering the turnstile one sees on the left the model of a floating laboratory, auxiliary to the Wellcome Tropical Research Laboratory at Khartoum. This boat travels up and down the Nile; it draws very little water and is fitted up for medical scientific research work. This model forms an apt threshold—as it were—to the main hall of primitive medicine. Here are medicine men's costumes from various countries—such as Uganda, the Upper Congo region and South Africa. A striking object in one corner is a full-sized model of a medicine man's hut in New Guinea. Perched on timber posts some 8 ft. from the ground, it is built on the plan common to the elevated dwellings of primitive mankind, and is in all probability handed on from the architecture of the early lake-dwellers.

The frieze of the hall is formed by masks of the savage medicine men and the "Devil Dancers of Ceylon." These are used as a scheme of decoration together with the skins of wild beasts. A most grotesque object is the Maori Talisman of Life and Death, a squat figure carved in wood—giving one the general impression of a cretin. On the walls are portraits, maps, diagrams, documents and pictures illustrating the past history and present knowledge of plague, malaria, yellow fever, and other tropical diseases. It is obviously impossible within the necessarily scanty limits of a descriptive report like the present to note adequately the many objects of interest contained in this and other parts of the Museum, but an outline of some of its chief attractions may be of some service to the intending visitor.

Near the main entrance is to be found a series of specimens showing various pathological conditions among human remains unearthed from a prehistoric Ethiopean cemetery at Gebel Moya, Sudan. It is still being excavated by an expedition under the direction of Mr. Wellcome. There are photographs showing primitive methods of sepulture. Some of the bodies are buried face downwards, some crouched, and so on. The skulls are prognathous, and the whole exhibit opens up a field of entrancing and notable interest to the ethnologist. One reconstructed grave shows some large gall-stones which were actually found *in situ.* There is also the skeleton of a young man, over 6 ft. in height—a point of much interest in connection with this prehistoric race, of which literally nothing is known further than can be inferred from these relics.

One walks from the main hall into an annexe of parasitology. Much of Dr. Sambon's valuable and original work on pellagra is here set forth. There is a full collection of drawings and diagrams of the various insect carriers of disease—illustrating the various stages and anatomy. There are also a number of microscopic slides showing the more important protozoal agents of disease. Ranged amongst these specimens are many interesting fetish heads, and other objects connected with savage medicine. One especially interesting exhibit is a curved black wood bowl about the size of an ordinary wash-hand basin. It is elaborately carved and fitted with a curved handle. This bowl is used by the Maori midwives to receive the child after birth, and is regarded as sacred. It is inlaid sparsely with mother-o'-pearl and carved with symbolic figures, and forms a beautiful, and so far as we know a unique example of art in a primitive race.

One next passes through a corridor lined with water colours and oil paintings. Amongst them is a large oil painting of Dr. Dee the astrologer demonstrating before Queen Elizabeth and her Court at his house in Mortlake. This is a fine painting by Glendoni, and was exhibited at the Royal Academy some twenty years ago. Another interesting painting shows the house of John and William Hunter; it was lent by the Faculty of Physicians of Glasgow.

From the corridor one walks into a large hall of statuary. The room is called the Hall of Statuary, in which is grouped the statues and other illustrative sculptures connected with the art of healing, with a gallery above. In the centre is the model of a Greek temple, containing a collection of terra cotta votive offerings, some of them taken from the bed of the River Tiber. There are a number of early surgical instruments arranged in cases—some Græco-Roman, some Egyptian, some Chinese and others African. All these are well worthy of careful note by anyone interested in the development of the art of surgery. There are some fine reproductions of statues of Apollo, Æsculapius, Hygeia, Cheiron, and the Egyptian god Ptah. A curiously quaint figure is that of Ixtlilton, the ancient Mexican diety of healing, Shen-nung, the Chinese founder of medicine, dating about 3000 B.C. As illustrating the thoroughness with which the museum has been organised, it may be remarked that many of these statues have been expressly modelled by a sculptor from authentic sources, including Ea, the earliest known Chaldean diety, and Dhanwantari, the Vedic Father of Medicine. A striking figure is that of Marduk, a Chaldean and Babylonian deity. Next comes Adapa, the Sumerian genius of healing. These three figures reach back as far as the recorded history of medicine can be traced. The date of Ea was about 5000 B.C., and the others somewhat later.

Returning to the cases ranged beneath the gallery, it may be noted that the general idea is to illustrate the evolution of the instruments which have always been found essential by all surgeons throughout the ages—as, for instance, the lancet, the speculum, midwifery forceps, the traction hook, and the enema. The lancet traced out in this way is shown in its earliest form as a pointed finger-nail, which the Babylonian priest-physician allowed to grow long so as to serve him for surgical purposes. Amongst savage races a similar use of the finger-nail persists to the present day. Native surgeons in the Pacific Islands used sharpened shells, and a flint knife is shown, used by the Aborigines of Australia. In New Guinea, the medicine man uses a sharpened tooth fastened to a stick. Certain natives of Central America substitute the pointed spine of the agave. A beautiful specimen is the flaked obsidian knife still used by the medicine men of Java. Next comes the early Roman lancet of bronze, the primitive-looking lancet used to this day by the Hindoo surgeons, and lastly the bleeding lance of more recent times.

A number of dental instruments are shown. One of the earliest extracting appliances is the "Pelican," a grim, business-looking implement on the lever principle, dating from the seventeenth century, and being the direct progenitor of the modern "Rey."

An exceedingly interesting dental exhibit is the model of an Etruscan gold denture dating from about 3000 B.C. Two excellently shaped upper central incisors, carved from a single ox tooth, are held in position by a narrow horizontal band of gold fastened at each end to existing teeth. This is nothing more nor less than a fine specimen of that self-same bridge work which most people would unhesitatingly ascribe to the genius of modern invention. The evolution of the tooth-brush is shown in an adjoining case; amongst the specimen brushes being the first tooth-brushes made for King George III., stamped with the Royal Arms.

The gallery is literally crammed with objects of interest, the mere recounting of which would take up several columns of this journal.

It would therefore be impossible to describe or even mention everything in detail. Everyone, however, will gaze with interest on the contents of the large case at the north end of the gallery, containing as it does a collection of the original apparatus used by Galvani, the father of electricity. Some enthusiasts would regard this exhibit as one of the finest in the collection, but no visitor need doubt that he will find something after his own heart in this marvellously complete museum.

The gallery also contains an evolutionary collection of microscopes, in number nearly 200. The earliest dates from the famous Leuwenhoek (a model) and the latest from the middle of the nineteenth century. The early surgical instruments in cases ranged along the west wall are of unique interest. They comprise amputation and trepanning sets, lithotomy instruments and various progressive patterns of the official outfits required by military and naval surgeons in ancient times. There is a large and valuable collection of charms, amulets and talismans of ancient and primitive peoples, besides many latter-day specimens from European countries. The Egyptian collection is specially fine and contains many specimens that are not to be found in the large museums.

In concluding this first notice it may be described generally as the finest collection of the kind ever brought together, and we again venture to express a hope that it may become the nucleus of a national medical museum. The whole of this collection has been studied and arranged with indefatigable zeal by Mr. C. J. S. Thompson, who has been engaged in historical medical research for a number of years. To his courteous and skilled information we are indebted for many of the facts on which this descriptive article is based.

Medical men may perhaps be reminded that no special invitation is necessary to enable them to visit 54A, Wigmore Street, Cavendish Square, London, W. As a matter of fact admission is at once obtainable by any medical man on presentation of a visiting card.

Permission has been given to Mr. Sydney Gaster, M.R.C.S., L.R.C.P., and Mr. Henry White, M.R.C.S., L.R.C.P., missionaries of the C.M.S., to perform the duties of Diocesan Readers in the London diocese during their present furlough.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug. 2nd, 1913.

At the meeting of the Gesellschaft für Chirurgie, Hr. Jacquin read a paper on

Arrest of Hæmorrhage from the Liver by Pedunculated and Free Flaps of Omentum.

He said the usual methods of arresting hæmorrhage from the liver were by ligature, suture, and tampons. The arrest of hæmorrhage was frequently attended by considerable difficulties. Suture often failed from the tissues being too soft, from the bleeding spot being badly situated as regarded accessibility, and finally, the condition of the patient did not admit of delay. Here tamponade was to be preferred. It was successful as regarded the arrest of the bleeding, but it had the disadvantage that the abdomen remained open and a large cicatrix was left. There was also the danger of secondary infection. At the suggestion of his chief, Geheimrath Körte, he had interested himself experimentally in the subject. He had resected portions of the liver in dogs; it was also to be borne in mind that the livers of dogs were very friable. He proceeded as follows: The left half of the liver was exposed, the lower part drawn down, and during manual pressure a part of the lobe was resected; a resected piece of omentum was then placed over the freshly-cut surface. Even up to one fourth of the liver there was no bleeding, and no death except one from peritonitis. The examination made after the animal was killed with chloroform showed no blood in the abdominal cavity, the flap of omentum had healed in nicely. (Preparation shown.) Half of the control animals in which the omentum was not sewn over the fresh cut of the liver died from hæmorrhage; there was profuse hæmorrhage into the peritoneal cavity. The action of the omentum was to be explained mechanically, possibly there was also a chemical action.

Hr. Körte said that after cholecystectomy he had tried to arrest the hæmorrhage by means of the omentum and had succeeded, so that tampons were not required. Experimentally, free flaps of omentum were stitched on, as the attachment had to be made all round and had to be very exact. In operations on the human subject, however, pedunculated flaps were to be preferred. Wounds of the spleen had been treated in the same way with a similar good result. Instead of omentum, strips of muscular tissue had been made use of as a means of arresting hæmorrhage from the liver. The use of the omentum was more simple and more suitable, it was more readily obtained, and also placed in position more readily.

At a meeting of the Society for Social Medicine and Hygiene, Hr. Ulrici opened a discussion on

Tuberculosis.

As far as regarded treatment, he said there were three ways in which this might be approached:—(1) By preventing infection in mass, and above all in children; (2) raising the power of resistance of the individual threatened; (3) the medicinal treatment of cases of commencing tuberculosis. Up to the present the last-named path was the one that was the most frequented. No doubt a great deal of good had been achieved in that way, but more in the way of individual treatment than as a social measure. The second route of treatment had also been travelled with good success, but in the direction of prophylaxis, which consisted in finding out such as were liable to contract the disease and the isolation of them, there was still much to be desired. The German Committee for Combatting Tuberculosis, the chief aim of which was the erection of sanatoriums, had widened their aims, and had provided stations for the care of early cases, and there were now 1,500 such stations in Germany, but so far, they had scarcely an official standing. Notification, compulsory examination of sputa, would do a good deal in the way of prevention of infant infection. The usual isolation of the patient in his own house did but very, very little. Considering the length of time in which the patient carried infection (put down by the speaker at four years), the stay in the curative institution was too short to prevent the spread of infection. The fatal cases that generally went into hospitals for five or six weeks had generally infected those about them. The only effective way was the strict isolation of the infected person in institutions selected by the stations, especially taking care to note as to whether children had been exposed to infection or not. The proposal he had made tentatively to house families in which there were tuberculous members was deserving of consideration. The insurance bodies of the Rhine province were striving to keep their tuberculous cases in institutions as long as possible. Hospitals for tuberculous patients with pensions had been called "Death Houses," and were a complete failure. A better and more frequented path was to treat patients for lengthened periods in curative institutions, where hopefulness, which only became extinguished very late in the disease, was encouraged by the sight of patients who were being benefited by the treatment. The expense, it was true, was enormous, but in view of the fact that in Germany 80,000 people were resident in asylums for the insane, was one that might well be faced.

AUSTRIA.

Vienna, Aug. 2nd, 1913.

Fatal Result of Injection of Salvarsan.

At the recent meeting of the Gesellschaft für Innere Medizin und Kinderheilkunde in Wien, a communication was made by Dr. K. Ullmann on the subject of salvarsan intoxication. The text was afforded by an account of the symptoms which he had himself observed in the course of a fatal case. The specially interesting clinical feature of its history was the fact that death occurred soon after the administration of the second injection of a normal dose of the remedy. Dr. Ullmann differentiated carefully between salvarsan intoxication and the normal clinical effects of its administration, and he emphatically expressed the conviction, gained by his own experience, that it is only by making this discrimination, and acting carefully and consistently on its indications that any practitioner can safely attain a sound opinion and safe guidance regarding the therapeutic value of this remedy, and the ability to foresee and avoid its toxic effects. The fundamental features of salvarsan-intoxication would, possibly at least, appear to be those of arsenical intoxication; nevertheless, it is decidely a mistake to regard its phenomena as purely and simply identical with, or wholly dependent on, the effects of arsenical poisoning. The distributive momentum, which Ehrlich has placed at the apical position of arsenical therapeusis, displays itself not exclusively in its great principal influence as an antiparasitic agent; it also manifests itself in the collateral toxic effects. The individual differences which are clinically displayed during the employment of the various preparations of salvarsan, and the various different effects of the administration of other organic arsenical therapeutic agents (atoxyl, arsophenilglyxin) bear very significant testimony to the specific effects, as well as mode of action, of salvarsan itself.

Dr. Löwy described the anatomical conditions that were discovered in the *post-mortem* examination of this case. Changes were found of which some had been of evidently acute nature, and others which must have run a chronic course. The acute were obvious on mere macroscopic examination as hæmorrhagic foci. Microscopic examination of these areas revealed multiple capillary hæmorrhages in the cerebral cortex and in the spinal marrow, especially in the central grey matter, which was throughout bestrewn with those focal extravations. The chronic morbid changes were in turn displayed in the thickened and infiltrated meninges, as also in the arteries and veins, in the coats of which extensive alterations had taken place. The arterial walls displayed extensive changes as the evident result of advanced endarteritis. The tunica intima was extensively affected by those changes, which had specially affected the elastica interna, the layers of the latter, which were obviously broken into fragments and split up into their superimposed composites. (Here a preparation was exhibited, and the structural changes referred to were demonstrated.) The coats of the veins had also undergone corresponding alterations; they were infiltrated and thickened.) But in addition to those morbid structural changes in the area vasculosa, there was supplementary evidence found in the brain substance of the prolonged advance of "chronic regressive" alterations, of which very convincing testimony was afforded by the presence of numerous corpora amylacea. The conclusion was accordingly suggestible, from the anatomical standpoint, that the very serious chronic morbid changes in the coats of the vessels, and the long-standing degenerative processes which had been progressing in the substance of the neural tissues in the depths of the brain, would account for the establishment of any effective pre-disposition to the development of the vascular lesions which had supervened upon the administration of the injection of salvarsan.

The Still-Chaufford Syndrome.

Dr. H. Pallitzer described cases of the Still-Chaufford syndrome complex. Of his three cases, two had reacted conspicuously to tuberculin—and, indeed much more energetically to bovine than to human tuberculin. The third manifested no very striking or significant reactionary phenomena. The symptomatic relations to tuberculosis which appeared to be presented by those cases are of a clinical aspect, which in many directions would seem fairly similar to those that have been pointed out by Poncet as characteristic of the mutual relationship of tuberculous rheumatism and inflammatory tuberculosis. But their substantial existence, and the significance of their presence when demonstrable, have by no means been definitely established up to the present. But inasmuch as both Still and Chaufford disclaim any such relationship with regard to the clinical syndrome with which their names have become specially associated, the above-named designation would seem expedient for the purpose of a temporary demarcation, at least. The presence of glandular swellings in cases of chronic rheumatism is probably much more frequent than our contemporary German medical literature would appear to indicate. They may be overlooked in many cases, just as in tumefaction of the spleen; this is specially true of enlarged axillary glands.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE CONTROL OF QUACKS.

To the Editor of The Medical Press and Circular.

Sir,—The leaderette in your issue of July 23rd on the subject of the control of quacks leads me to mention that I have recently met with a case where "the curses have come home to roost."

A quack, of a very malignant type, recently brought his wife to me with double glaucoma, so advanced as to be almost beyond recovery, even in the one eye that had not gone blind. Her husband told me he had cured her of lock-jaw and three cancers (one would have sufficed for most ordinary beings), and on my suggesting the consideration of an operation he emphatically negatived it entirely. I found out from his wife (the patient) that her husband had refused to allow her to see any medical man for the past two years, and she—although an active partner in his "practice"—had the feeling that a mistake had been made. This, when told to a friend, produced from him the history of one of his patients who could not see him on a certain day because she had to visit a "specialist" (!) who was treating her once a fortnight for a dislocated hip. This hip slipped out every 14th day, so it seemed, and she had to have it replaced and treated at the cost of two guineas. It rather spoilt the romance of the story when it was ascertained that she walked to the station, took a two hours journey, walked to the specialist, and returned in the same manner, and with no discomfort or pain going or returning. A lame leg would not impede a quack much, but we suspect complete blindness will; but, who knows, they might heal (?) by touch then.

I am, Sir, yours truly,
A. A. Bradburne.

Manchester.
August 1st, 1913.

ALCOHOLIC QUACK MEDICINES.

To the Editor of The Medical Press and Circular.

Sir,—I believe most practitioners will endorse "Temperance Reformer's" strictures on certain medicated wines, but that the medical profession order them extensively is, I think, a libel. It does not say much for the progress of education that people buy such wines when there are wine merchants of repute of whom they can obtain wines of a known quality, and the other ingredients supposed to be in medicated wines are much better taken separately. I must differ entirely from your correspondent when he states so definitely (Medical Press, July 16th, p. 72) "that in every case of disease of whatever origin, where the chief subjective symptom is depression, alcohol acts as a poison of the most pernicious character."

I have been treating cases of indigestion now for over a quarter of a century, in many cases the chief subjective symptom being depression. I have thought it advisable in such cases to prescribe alcohol, with very excellent results, and nothing of the nature of a poison has manifested itself. In my own case, suffering from great depression and indigestion after an attack of influenza, I entirely cured myself by taking one ounce and a half of old matured whiskey in water before dinner; I was then able to partake of the meal and digest it. This I did for a fortnight without any pernicious effect. Like all other poisons, the dose of alcohol should be carefully prescribed.

I am, Sir, yours truly,
Thomas Dutton, M.D.

London.
July 30th, 1913.

A DOCTOR'S WIFE ON DRESS.

To the Editor of The Medical Press and Circular.

Sir,—The wife of an average struggling doctor in a northern factory town with a brood of children—but not too numerous for the philoprogenitive instincts of their parents—has few opportunities of getting a real holiday during the earlier years of her married life, very few opportunities of seeing anything of the world beyond the narrow horizon of her habitual environment. For the first time in perhaps twenty years I have gained a little freedom. I have been away for some weeks, and have still a few weeks to spend before the finish of my holiday. I have had some days in London, some in Paris, some in various well-known Swiss resorts, ending, so far, with this fashionable rendezvous, Pontresina. My impressions have been various, mostly pleasant, some delightful, some few disagreeable. Among the last is my impression with regard to the dress of Englishwomen of the day. There is evidently a large minority who are not the slaves of fashion, but the great majority are merely the servile followers of the horde of male and female milliners who invent and design the dress which most women in every country throughout what is called the civilised world essay to copy. In the case of our fellow countrywomen at the present day the result on the whole is anti-hygienic, immodest, and indecent. Except the Germans, Englishwomen are the worst dressed that I have encountered among the cosmopolitan crowds with which I have recently mixed. The vast majority of Frenchwomen know how to dress themselves individually—how to enhance what charms they may possess, how to veil defects or blemishes of face or figure that demand concealment. The average Englishwoman has no idea of this. She evidently accepts her outer clothing on the word of the shopkeeper that it is "the latest Paris fashion," puts on the garments blindly, and makes herself a caricature of what in other hands might have some artistic significance. The innocent English mother and her more innocent daughter seem mostly unaware that Paris fashions are to a large extent invented for the requirements of the demi-monde. They don't know that the trade which we in England call prostitution is in France distinguished by a variety of pet names suggestive of the tolerance, favour, or admiration in which it is held by vast sections of male, if not female, society; and these Englishwomen would be amazed to learn that the misuse of a certain kind of French fashions gives them an appearance such as French prostitutes, except perhaps the lower ranks of this profession, would be ashamed to display. In London streets I saw vast numbers of sweet-looking girls with innocence written on their faces garbed in the indecent fashion I describe. They swarmed on the Boulevards in Paris, they crowd the hotel I am now in, and filled those I stayed at on my way here. My attention to this matter was stimulated by the extremely clever article in the *Times* on "Dress and Undress" which I read in London when starting. It was followed by an equally clever correspondence. Some writers tried to prove that the progress towards nudity which they described was the result of deep psychological influences acting without the consciousness of the agents, the women; but none of these explained how the supposed influences of the British female mind had been first able to lead the imagination of French fashion-mongers in the direction it had taken. It seems a tremendous pity that the mass of Englishwomen cannot shake themselves free from the bondage they now submit to. The present fashions must tend to destroy modesty, whilst no clothing could be more unhealthy than the garments of the day. They clog and hamper all freedom of movement, and reduce the wearer to the level of a useless doll. Englishmen are the best dressed in the world; a little courage might place their womenkind in a similar position, able themselves to set the fashion to the whole female world willing to clothe themselves in a way in which simplicity, beauty, health and utility might all be combined.

I am, Sir, yours truly,

A Doctor's Wife.

Pontresina,
July 29th, 1913.

REVIEWS OF BOOKS.

THE NAUHEIM TREATMENT OF HEART DISEASES (a).

We feel pleasure in welcoming the fourth edition of this useful little manual. A medical man who is previously unacquainted with the method of preparation and administration of Nauheim baths in circulatory and cardiac affections cannot fail to gain much useful and practical information by careful perusal of this compact little book. In addition Dr. Thorne Thorne has given a series of most excellent and clear photographic illustrations of the way in which the Schott exercises are performed. These exercises are recommended as being of great use as an adjunct to the baths, and may on occasion be very beneficial in cases where, for various reasons, it is not possible to give the baths. We cordially agree with Dr. Thorne Thorne that baths and exercises carefully given in the manner which he prescribes, having due regard for the precautions to be adopted, are highly to be recommended in suitable cases. The reader is referred to explicit statements on the part of the author as to the distinction to be drawn between those cases which can be restored to health for a long period or permanently cured and those cases in which marked benefit is uncertain or which are unsuited for treatment. Put shortly, it amounts to this, that advanced organic disease, whether valvular or muscular or those which manifest grave defects in the node, bundle or its branches, in which the recuperative powers have been undermined, are not likely to yield good results from this kind of treatment. Favourable cases, according to Dr. Thorne Thorne, are many and various, and making all allowances for the enthusiasm of the writer, we are inclined to admit that results justify, for the most part, the selection that he has made.

The line diagrams of cardiac dulness illustrating various clinical cases appear, however, somewhat weird, and the author does not state, so far as we can see, whether these are intended to give results of percussion or of X-Ray investigation. In any case we fail to see how the outline of the base of the heart can possibly be separated out from its junction with the great vessels. We must confess that we would rather see records taken in a more usual manner, each indicating the position of the apex beat and the exact amount of extension to left or right. The author's style is clear and readable, and we recommend those in search of information in concise form to consult this little book.

TREATMENT. (a)

It is with peculiar regret we come to the notice of these handsome volumes. The editors were two of the most gifted of American physicians, one of them long recognised as a leading teacher and thinker, the other giving promise of equal distinction. Both are gone from us, and the world of medicine is the poorer.

We are speaking descriptively in saying that this system of treatment is American. Out of the more than eighty contributors, only four are cis-Atlantic, viz., Sir Clifford Allbutt, Sir Lauder Brunton, the late Clinton Dent, and Sir Berkeley Moynihan. The remainder may be taken to be fairly representative of the best of American medicine, though, as is natural, names which convey little to us in these countries are found side by side with those that are familiar.

The work opens with a brief but philosophic essay by the senior editor on the Fundamental Principles of Therapeutics. "It goes without saying," he says, "that the essential of success in therapeutics is correct interpretation." And he has impressed this view on his contributors, so that article after article opens with a discussion on diagnosis. "The *indications* for treatment," he tells us again, "are based on: (1) The cause of the disease; (2) a true conception of the morbid process; (3) the result of the examination of all the organs of the body; (4) the symptoms; and (5) the facts derived from the family, the social, and the previous medical history." Following on this introduction, we have general discussions on the various methods of treatment, which take up some seven-eighths of the first volume. The remainder of the work deals with the various groups of diseases in sequence.

We turn with interest to the sections contributed by British authors, and we find with pleasure that to Sir Clifford Allbutt is allotted the discussion of Diseases of the Cardio-vascular System. Needless to say, he deals with the whole subject in his own clear, logical, and convincing way. He dislikes the word "compensation," because it suggests "some notion of intervention, of device prearranged by the agency of nature, as the 'motorist' provides a spare tire in his car," and he suggests "readjustment" as a better term, since the process is merely the continuance of the process by which equilibrium has developed and survived and maintains itself. By the way, we must sympathise with Sir Clifford Allbutt in having to look at his clear-cut prose disfigured by American spelling. "Iodid" and "marvelous" give us pause, but is it the English author or the American editor who is responsible for the strange word "practitious," which we do not remember to have seen before?

(a) "The 'Nauheim' Treatment of Diseases of the Heart and Circulation." By Leslie Thorne Thorne, M.D., etc. Fourth edition. Crown 8vo. Pp. viii. and 104. With 55 illustrations. London: Bailliere, Tindall and Cox. 1913. Price 3s. 6d. net.

(a) "A Handbook of Practical Treatment." By Many Writers. Edited by John H. Musser, M.D., LL.D., and A. O. J. Kelly, A.M., M.D. In Three Volumes, pp. 909, 865 and 1,095. Philadelphia: W. B. Saunders Company. 1911 and 1912. Price 75s. net.

If Sir Clifford Allbutt's contribution is characteristic, so is that of Sir Lauder Brunton. He is charged with the discussion of the General Principles of Drug Treatment. He starts with a caveat, "While the effect of faith is very great in influencing the action of drugs and of other means of cure, yet drugs themselves, when properly used, have an enormous power to cure and prevent disease." Sir Lauder Brunton has indeed a faith which is shared by few physicians nowadays. It is perhaps due to the subject rather than to the author that the article deals not so much with the cure or prevention of disease, as with the suppression of symptoms. Nevertheless, Sir Lauder Brunton fails to make it sufficiently explicit that this is the case. We are told, for example, of the pathology of headache that the pain is "due to what one might term a colic of the arteries in the head, there being peripheral contraction and central dilatation." The use of such drugs as antipyrin and phenacetin is advised, without a word of caution as to their dangers.

Dr. Hektoen's article on the General Principles of Serum Therapy, though excellent as a treatise on immunity, is a little disappointing from the point of view of the practitioner looking for help in actual treatment. The title also is misleading, since the article includes a brief and entirely inadequate description of vaccine treatment. The brevity of this description is not due to lack of space, since space is wasted in discussing the serum treatment of various conditions in which such treatment is useless. The article on Toxæmia, Septicæmia, and Pyæmia, by Drs. Pearce and Elting shows a similar neglect of modern work. "The progress already made in the treatment of acute infections by immune sera offers some support for the hope that eventually each form of toxemia or septicemia may be treated by a special antitoxic or bactericidal serum." It is much more than ten years since this could be said with truth; and, indeed, in the next sentence the authors state quite accurately that at present "successful serum treatment is practically limited to diphtheria."

One of the most comprehensive articles in the work is that on Tuberculosis, by Professor Otis. He gives full advice as to the hygienic and dietetic treatment, and treats in detail of open-air methods, whether practised at home or in a sanatorium. The article is exceptionally well illustrated with plans and photographs of shelters, sanatoria, and hospitals.

We regret that space prevents us dealing with more of the articles. Worthy of special perusal are those on Constipation, and on Diseases of the Bronchial Tubes, by Musser; and on Pneumonia, by Dr. H. A. Hare. As a whole we can confidently recommend the book as helpful and suggestive. No one who uses it intelligently can fail to benefit thereby.

Each volume is furnished with an excellent index, but it would have been more convenient had there been a fuller table of contents.

THE SUPRARENAL GLANDS. (*a*)

The fact is obvious that the present medical generation is gradually establishing another special claim on the admiring gratitude of scientific posterity. What we refer to is the gradual solution of the problems of those very enigmatical structures which were long known—almost exclusively, indeed—by the collective appellation of "ductless glands." One of the distinguishing features, by the way, of this rather mystical group of unexplained items of human anatomy was, of course, the fact that they collectively numbered *seven*—a coincidence which obviously connected them with the unattainable, in the days when astrology and occultism played the chief *role* in physiological function and clinical phenomenology. Even when Luschka brought up his small contributory reinforcements to swell the list—the *glandula coccygea* and *glandula intercarotidea*—they still reached but a significant number which was at least semi-sacred to science, if not so exactly to mysticism.

The first considerable rent in the investing screen was the result of Addison's observations on the disease with which the name of that distinguished clinical observer is inseparably—and most deservedly—connected. But even still the purview remained very limited, and awaited the stimulating effects of the curious *spermatic* experiments of Brown-Séquard, and the resurrectionary movements of *opotherapy*, and the remarkable results obtained by the employment of *adrenalin* and of *thyroidin*. The (consequent) general speculations on the presence and physiological uses of the "internal secretions" then came up to expand the field of scientific research; and the borderland fringe of quasi-metaphysical ratiocination, with its opportunities for the roping-in of scientific "claims." One of the results is that we are now happily faced with the preparation of a splendid series of text-books dealing with "Les Glandes à Sécrétion Interne," of which the present volume is a representative octavo; the text of which displays throughout the exquisite crystalline transparency that so happily characterises all the scientific literature prepared by high-class Gallic experts. The quantity of concentrated essence of the results of experimental research here contained would surely give anti-vivisectionists material for the application of what depth of thought they are apparently capable, and leave some baskets-full over. The suprarenal gland extends its functional roots further, both in the circumferential and downward vertical direction, than we had ever dreamed of till quite recently. Even sudden death has been proved a result of latent destructive lesions of the suprerénals. And, unhappily, we find that: *Les causes qui peuvent être incriminées dans l'apparition de cette insuffisance suraiguë sont quelquefois impossibles à déceler.* Thus we have before us a vast domain of untilled, and surely productive, virgin soil; while the inspiring question asked of the ambitious budding pathologist is: "Can ye labour lea, young man?"

THE FATAL ILLNESS OF NAPOLEON BONAPARTE. (*a*)

The velocity of production of Napoleonic literature seems to progress contrary to most physical procedures of centrifugal movement, in accordance with the *direct* "law of squares." No sign of flagging of interest in the record of the greatest of the world's conquerors, and one of the most startling of its psychological phenomena, appears to be suggested by even the suspicion of an approaching shadow, as the centenary anniversary of his final overthrow approaches within range of easy measurability. Indeed the mysterious influence of the *Vril* which radiated from the Corsican's magnetic personality during life still seems to keep the upper strata of the philosophic atmosphere of our twentieth-century civilisation all a-quiver with its inexplicable undulations. Few, indeed, of the questions that involve "the Napoleonic legend" would seem to have been finally answered; and the medical enigma appears to be the only possible or conceivable one which had not received the attentions of some volunteer Œdipus before the present year.

Dr. Chaplin has undertaken the fascinating task of throwing a new light on the pathological item in the biography of the hero of Austerlitz. The subject has, according to his own account, being engaging his special attention for a number of years. He seems to be quite satisfied with the result of his researches, an appreciation which we can by no means pretend to share. Of his two special discoveries in this connection, the first is that the fatal gastric cancer was preceded by a chronic ulcer—which is not at all unlikely, and cannot now be definitely proved or disproved; while the pre-existence of the latter is by no means incompatible with that of the endemic hepatitis diagnosed

---

(*a*) "Glands Surrenales et Organes Chromaffines." Par M. Lucien, et J. Parisot. Avec 100 figures dans le texte. Paris, Societe d'Editions Scientifiques et Medicales. F. Gittler, Directeur. 1913.

(*a*) "The Illness and Death of Napoleon Bonaparte (a Medical Criticism)." By Arnold Chaplin, M.D.Cantab., F.R.C.P. With three illustrations. London: Hirschfeld Brothers, Ltd. 1913.

by O'Meara, at a date at which cancer had assuredly not begun to develop. The second discovery announced by our author is that Napoleon was not epileptic; a view which we have no hesitation in declining to accept, in presence of the evidence to hand of contemporary belief. The fact that the question is *not* mentioned by his medical attendants—who assuredly knew of the popular rumour—is strongly *confirmatory* to the minds of some of us; no medical man wishes to discuss the phenomena of epilepsy in a favoured patient, for the benefit of the idly curious and profane; especially when the victim is one of cosmopolitan fame and hypnotic personal power.

Our author displays the very undesirable quality (in a clinical critic, especially) of frequently contradicting himself, and then making matters worse again by forgetting that he has done so! The subject of Napoleon was surely worthy of closer attention—the research of "many years" has, in the present instance, yielded but a very lean crop indeed. And medical men should be the last to slur over the memory of the man who, after a wealth of experience unparalleled in the history of the human race, referred in his last Will and Testament to Baron Larrey as *the best man he ever knew.*

LATERAL CURVATURE OF THE SPINE. (*a*)

During the past six years, considerable attention has been devoted to the interesting subject of spinal curvature. Much practical work has been done, and our knowledge of the causation of deformities of the spine and of their correction has been widely enlarged. The present volume, which is the second edition, marks the present attitude of mind of the author, in common with various American and German authorities quoted, towards lateral curvature. One could wish that the English school of thought and practice had been more adequately represented, for although the book is dedicated to Mr. Robert Jones, of Liverpool, there appears to be little mention of his teaching or of the observations of other British surgeons or school medical officers. Similarly, the valuable anatomico-physiological work of Keith on the influence of the erect position upon the vertebral column, and the work of Halls Dally upon the influence of deep and proper respiration in promoting well-balanced action of the thoracic and abdominal musculature which has the effect of maintaining a correct position of the spine, might with advantage be referred to, since, as the author himself admits, "the general grouping and arrangement of the muscles in their relation to the spine has an important practical bearing on scoliosis" (p. 9). Turning from prophylaxis to treatment, we are glad to see that a considerable portion of the book is devoted to this matter, and for purposes of discussion cases are divided into two main groups: (1) postural or functional, and (2) organic or structural. This, on the whole, strikes one as a useful division which lends itself well to a description which follows of gymnastic treatment, symmetrical and asymmetrical exercises, clearly illustrated by line diagrams, forcible correction, braces and corsets. The creeping exercises of Klapp, which of late have received more attention in this country, have a page and a half given to their description, but the important warning is not clearly enough insisted upon that these, as well as many of the other exercises mentioned, are in the majority of cases of little permanent value unless carefully supervised by the doctor at frequent intervals during the course of treatment. Stress is rightly laid on fixation of the pelvis during gymnastic exercises performed in the standing position without apparatus, and the occurrence of scoliosis during school life, especially its increase in the less severe forms during the later years of school, is referred to in a separate chapter. In the letterpress to fig. 83, "curve" should surely read "burn."

(*a*) "Lateral Curvature of the Spine and Round Shoulders." By Robert W. Lovett, M.D., Boston, Assistant Professor of Orthopædic Surgery, Harvard Medical School. Second edition, revised and enlarged, with 171 illustrations. London: Rebman, Ltd. 1912.

MEDICAL NEWS & PASS LISTS.

Royal College of Surgeons in Ireland.

At a special meeting of the President, Vice-President and Council, held on Thursday, the 31st ult., Mr. R. Dancer Purefoy, President, in the chair, Dr. Evelyn John Evatt was elected to the position of Professor of Anatomy in the Schools of Surgery.

Professor Evelyn John Evatt is the eldest son of Captain C. A. Evatt, late of H.M.S. *Cherub*, and of Mount Louise, Smithborough, Co. Monaghan. He is in his 45th year, having been born in March, 1868. His maternal grandmother was a scion of the family of Colclough, of Tintern Abbey, Co. Wexford. He spent many years of his life with his father in India.

On becoming a medical student he joined the schools of the Royal College of Surgeons in Ireland, in which he studied for four years. He then went to Newcastle-on-Tyne, where in 1900 he took the degrees of M.B. and Bachelor in Surgery of the University of Durham. In the same year he obtained the licence in Midwifery of the Rotunda Hospital, Dublin.

Immediately after obtaining his qualifications, Dr. Evatt was appointed Demonstrator of Anatomy at the University College, Cardiff, and there he worked for nine years, at first under Professor A. F. Dixon, of Trinity College, Dublin, afterwards under his successor in the Chair of Anatomy at Cardiff, Professor David Hepburn. In 1904 Dr. Evatt was appointed Lecturer in Applied Anatomy in University College, Cardiff. This post he resigned on being appointed, in 1909, Professor of Anatomy at the Manitoba Medical College, Winnipeg, Canada. In 1912 he was elected External Examiner in Zoology for the University of Manitoba.

From the foregoing it will be seen that Dr. Evatt has had a very distinguished scientific career, and is certain to prove a worthy successor of Alec Fraser, Daniel Cunningham and Alexander Macalister—to go no further back in the annals of the Schools of Surgery of the Royal College of Surgeons in Ireland.

Professor Evatt has already done much original work in anatomy and embryology. He is at present engaged in writing a text-book of "Descriptive Human Embryology" at the invitation of a firm of medical publishers. This will probably be published during the current year.

Dr. Evatt holds the rank of Major in the Royal Army Medical Corps (Territorials). He is therefore well qualified to take on the work connected with the College of Surgeons' Contingent of the Officers' Training Corps.

Early Books on Medicine.

The British Museum authorities, in connection with the International Congress of Medicine, are exhibiting in the King's Library a series of early manuscripts and books illustrating the history of medicine. Several interesting examples of the writings of the herbalists are shown. Attention is drawn by the exhibits to the curious practice followed shortly after the invention of printing of applying the process to earlier works, and not to those of contemporaries. There are several volumes dealing with the plague, one of them being entitled "a passing gode lityll boke necessarye and behouefull agenst the Pestilence." Perhaps the most curious of the exhibits, however, is the manuscript of a contract between Nicholas Alcok, citizen and barber surgeon of London, in the reign of Henry VIII., and Robert Morton, of High Holborn, in which Nicholas promises to treat Morton for the bite of a mad dog for the very considerable fee of five pounds sterling.

The Hospital Sunday Fund.

The Lord Mayor presided last week at the Mansion House over a meeting of the Council of the Metropolitan Hospital Sunday Fund, called to receive the report of the Committee of Distribution.

The report of the Committee stated that the total of the fund was £50,381. Two hundred and sixty-three institutions had applied to participate in the fund, being six more than in 1912. The Committee recommended the distribution of £59,134.

The Committee had determined the basis of award to St. George's Hospital, but they recommended that no order be made as to payment until they were satisfied that no payment was made from the general fund of the hospital to the medical school except for work done in the treatment of the patients. A similar course had been pursued in the case of the award to St. John's Hospital for Diseases of the Skin, payment being withheld pending the result of litigation which was still undecided.

Sir William Church, Bart., moved that the report be adopted and the awards paid with the exception of the two mentioned. He remarked that of the total of £59,381, £31,485 had been derived from church collections, which was somewhat less than in former years. Dividends on Mr. George Herring's bequest were £20,793.

The report was adopted.

Medical Treatment ot School Children.

At a meeting of the Surrey County Council last week the revised scheme for the medical treatment of school children in the county, which has received the approval of the Board of Education, was adopted, and it was decided that the following fees should be charged to parents:—(1) Operations for tonsils and adenoids, including the necessary medical supervision after the operation, 10s. per case; (2) prescription of spectacles, 2s. (a separate charge will be made for spectacles; the charge will be the cost price, which will probably vary from 1s. 9d. to 4s. a pair); (3) X-ray treatment of ringworm, 8s.; (4) ordinary treatment of ringworm, 2s.; (5) treatment of running ears, 2s.; (6) other minor ailments, 1s.; (7) dental treatment—extractions, 6d. for one tooth, 1s. for two teeth or more, gas 1s. 6d. extra, fillings 1s. 6d. The above fees include any necessary drugs and dressings.

It is intended that the above fees should be regarded as maximum charges, and that it should be open to Care Committees to recommend a reduction of the fee in individual cases. The following scale of annual payments has also been adopted:—1s. 6d. per annum for one child; 2s. 6d. for two children; 3s. for three or more children.

The Annual Conference of the National Association for the Prevention of Consumption.

The Prime Minister opened, on Monday last, at the Central Hall, Westminster, the fifth annual Tuberculosis Conference organised by the National Association for the Prevention of Consumption. Lord Balfour of Burleigh, Chairman of the National Association for the Prevention of Consumption, presided, and amongst those present were Lady Aberdeen, Mr. Burns (President of the Local Government Board), and Lord and Lady Glenconner. The great hall was crowded with delegates, many of whom came from Continental countries and America. The principal topic of discussion was the value of the tuberculin treatment, the first paper upon which was read by Dr. H. W. G. Mackenzie, followed by Professor Sims Woodhead (Cambridge) and Professor Dr. Sims Rabinowitsch-Kempner (Berlin), Dr. Nathan Raw (Liverpool), Sir James Kingston Fowler, Dr. W. C. White (Pittsburg), Dr. Halliday Sutherland, Sir Robert Philip (Edinburgh), and Professor Sir St. Clair Thompson.

Royal College of Physicians and Surgeons.

At the first Professional Examination of the Royal Colleges of Physicians and Surgeons, held on the 15th, 16th, 17th, 18th and 19th ult., the following candidates were approved in the subjects specified below, viz.:—

Chemistry and Physics.—Robert G. Addenbrooke, Gerald A. A. Bradnack, Charles H. Carroll, Nai Chena, John R. Cox, Allen R. Crane, Gerald H. Duffield, Frederick K. Escritt, Wyndham B. Farrington, Evelyn H. Johnson, Walter H. Maudling, Kevin R. O'Brien, Alfred Pain, Ronald E. Rampling, Florence M. Rhodes, Alan H. Richardson, Guy Rooker, Henry L. Slaughter, Robert M. Somerset, Stuart W. Southwood, J. A. Stephens, Thomas N. Strange, Abbass H. Talaat, John N. Terry, Graham McK. Thomas, Francis E. G. Watson, and Dudley F. Wilson.

Chemistry.—Harold C. Clifford-Smith, Horace S. Drabble, Robert Erskine-Gray, Frederick H. Hyland, Mahomid Ibrahim, Lillian Lowenstein, Ralph K. Marwood, Khurshedjee Jamsedjee Rustomjee, and Ahmad Hussein Samy.

Physics.—William B. S. Andrew, Jane Crawford, Bryan O. Dewes, Noel E. Fasken, Edward F. Gillett, Hussein Amin Hathout, Christopher H. Macklin, Hugh Morris-Jones, Percival Randall, Douglas R. Thomas, Ian Thomson, and Graham A. O. White.

Biology.—Robert G. Addenbrooke, Norman J. Ainsworth, Herbert C. Apperly, Harry Barlow, Oswald Bastable, Frank Blake, John R. Cox, Francis W. Crook, Edward F. Gillett, Philip Green, Frank J. Harrington, Mamtaz Wali Mahomed Hassanally, Austin G. Hewer, John R. Houghton, Thomas G. James, Mohamed Khalil, Lillian Lowenstein, Alfred Yaphet Massouda, Gordon Millar, John W. W. Newsome, Alfed Pain, Marcel L. Quinlivan-Bulger, Percival Randall, Florence M. Rhodes, Khurshedjee Jamsedjee Rustomjee, Henry M. Savery, John A. Stephens, Phyllis Stevens, Thomas N. Strange, Frank H. Stuttaford, Trevor F. Thomas, Frederic F. Wheeler, and Graham O. White.

Royal College of Surgeons of England.

At an ordinary meeting of the Council of the Royal College of Surgeons held last week, with Sir Rickman J. Godlee, President, in the chair, the following distinguished foreign and Colonial surgeons were elected Honorary Fellows of the College:—

A. F. von Eiselsberg, LL.D., M.D., Professor of Clinical Surgery at the University of Vienna; E. Fuchs, M.D., Professor Ophthalmology at the University of Vienna; H. Hartmann, M.D., Professor of Clinical Surgery at the University of Paris; T. Tuffier, Professor of Surgery at the University of Paris; A. Monprofit, M.D., Professor of Clinical Surgery at the School of Angers, University of Paris; Dr. A. Bier; Professor of Surgery at the University of Berlin; Professor Dr. Werner Korte, Director of the Surgical Division of the Urban Municipal Hospital, Berlin; Dr. R. Bastianelli, Professor of Clinical Surgery at the Royal University of Rome; J. Nicolaysen, M.D., Professor of Surgery at the Royal Fredericks University, Christiania; H. Cushing, M.D., LL.D., Professor of Surgery at Harvard University; F. D. Bird, M.B., M.S., Lecturer in Surgery at the University of Melbourne; J. B. Murphy, A. M., M.D., LL.D., Professor of Clinical Surgery at the North-Western University, Chicago; W. J. Mayo, A.M., M.D., LL.D., Surgeon at St. Mary's Hospital, Rochester, U.S.A.; George Washington Crile, M.A., M.D., Professor of Surgery, Western Reserve University, Cleveland, U.S.A.,; Francis John Shepherd, M.D., LL.D., Professor of Anatomy and operative Surgery, McGill University, Montreal.

The following candidates, having passed the required examinations and conformed to the by-laws, were admitted Members of the College:—G. W. M. Andrew, B.A., J. V. O. Andrew, B. W. Armstrong, Kathleen J. Armstrong, S. L. Baker, F. Balkwill, J. R. Barrough-Clough, Margaret M. Basden, E. J. Boyd, B.A., E. A. Brock, A. E. Brown, B.A., Winifred F. Buckley, C. F. Burton, E. R. Chambers, Nai Cheune, W. H. W. Cheyne, Irene N. Clough, D. M. Connan, H. W. Cooke, R. Creasy, H. E. Creswell, B.A., H. L. Cronk, B.A., J. M. Curé, M. Das, R. W. Davies, S. B. Depree, D. J. Evans, H. W. Evans, H. Gibson, A. L. P. Gould, B.A., M. Gross, E. C. Hanna, A. M. Humphry, A. E. W. Irdis, G. D. Jameson, R. O. H. Jones, J. W. Kemp, G. L. Keynes, B.A., R. H. Lucas, Jessie McDonald, Margaret J. McEnery, W. J. McKay, D. D. Malpas, R. V. Martin, C. F. Mayne, B.A., J. D. Mercer, A. V. Moberly, W. F. Morgan, F. H. Mosse, G. T. Mullally, W. L. New, H. J. Orr-Ewing, D. S. Page, B.A., A. E. Panter, B.A., M. W. Paterson, P. E. H. Patey, V. D. Phatak, E. Phillips, J. W. Pigeon, B.A., F. P. Pocock, R. F. Quinton, K. V. R. Rao, M. O. Raven, B.A., H. A. Richards, B.A., H. C. Rigg, F. C. Robbs, E. D. Scott, A. L. Shearwood, L. R. Shore, J. S. Sloper, W. S. Soden, B.A., Mildred B. Stogdon, A. W. Taves, E. S. Taylor, B.A., A. Tilbury, J. L. O. Tilley, T. B. Vaile, G. O'N. Waddington, T. Warrington, B.A., J. R. M. Whigham, W. C. Whitworth, H. A. Williams.

C. Glover, having passed the requirements of the dental and surgical sections of the Board of Examiners in Dental Surgery, was admitted a Licentiate.

Mr. A. Rendle Short, F.R.C.S., Assistant Surgeon to the Bristol Royal Infirmary, was elected a member of the Board of Examiners in Anatomy and Physiology for the Fellowship; and Mr. Norman G. Bennett, M.B., M.R.C.S., was elected a member of the Board of Examiners in Dental Surgery.

Royal College of Physicians of London.

At the ordinary quarterly *Comitia* of the Royal College of Physicians held last week, the President, Sir Thomas Barlow, being in the chair, the following Fellows of the College were appointed officers of the College for the ensuing collegiate year:—

Censors: Sir J. Kingston Fowler, K.C.V.O., M.D., W. Hale White, M.D., Howard H. Tooth, C.M.G., M.D., T. Dyke Acland, M.D.; Treasurer: Sir Dyce Duckworth; Emeritus Registrar, Edward Liveing, M.D.; Registrar: J. A. Ormerod M.D.; Harveian Librarian, Norman Moore, M.D.; Library Committee: H. D. Rolleston, M.D., L. G. Guthrie, M. D., H. M. Fletcher, M.D., R. H. P. Crawfurd, M.D.; Curators of the Museum: J. M. Bruce, M.D., S. J. Sharkey, M.D., F. W. Andrewes, M.D., and W. Hunter M.D.; Finance Committee: Dr. Donald Hood, C.V.O., M.D., H. W. G. Mackenzie, M.D., and Sir James Reid, K.C.V.O., M.D.

The following were elected Examiners for the Licence Diploma:—

Chemistry.—J. M. Thomson, F.R.S., H. C. H. Candy, B.Sc.

Physics.—H. S. Allen, D.Sc., F. Womack, B.Sc., M.D.

Pharmacy.—H. J. Campbell, M.D., R. B. Wild, M.D., R. H. Miller, M.D., A. R. Cushny, W. E. Dixon, M.D., F.R.S.

Anatomy.—W. Wright, F.R.C.S., L.R.C.P.

Physiology.—L. E. Hill, M.B., F.R.S., and J. Mellanby, M.D.

Medicine.—L. E. Shaw, M.D., H. W. G. Mackenzie, M.D., F. W. Mott, M.D., J. S. Bury, M.D., A. F. Voelcker, M.D., C. Ogle, M.D., R. H. P. Crawfurd, M.D., Sir Bertrand Dawson, K.C.V.O., M.D., W. J. Harris, M.D.; H. B. Shaw, M.D.

Midwifery.—C. M. Handfield-Jones, M.D., J. S. Fairbairn, M.B., H. Williamson, M.B., C. H. J. Lockyer, M.D., J. B. Hellier, M.D.

Public Health.—H. R. Kenwood, M.B., L. C. Parkes, M.D.

Tropical Medicine.—F. W. Andrews, M.D., and W. J. R. Simpson, C.M.G., M.D.

Murchison Scholarship.—F. de Havilland Hall, M.D., and H. D. Rolleston, M.D.

J. B. Christopherson, M.D.Camb., being resident in Khartoum, was admitted to the Fellowship in absentia. Dr. W. Aldren Turner will represent the College at the third International Congress on Neurology and Psychiatry to be held at Ghent from August 20th to 26th next.

On the recommendation of the Committee of Management, Sir W. Watson Cheyne, C.B., F.R.S., was appointed visitor to the examinations of the Egyptian School of Medicine. The following institutions were added to the list of institutions recognised by the Examining Board in England for instruction in chemistry and physics:—Bradford College, Berkshire; Victoria College, Jersey; Exeter School, Northampton, and County School, Northampton; and Taunton School.

NEW MEMBERS.

The following gentlemen, having passed the required examinations, were admitted members of the College:—Fleet-Surgeon E. Bassett Smith, C.B., L.R.C.P., and M.R.C.S.Middlesex, C. Clarke, M.D. Lond., L.R.C.P., and M.R.C.S., Bristol and Univ. Coll., Lond.; A. Davies, M.D.Lond., L.R.C.P. and M.R.C.S., Westm.; A. H. Gosse, M.B.Camb., L.R.C.P. and M.R.C.S., St. Mary's; A. B. Gunson, M.D.Edin.; A. A. Ismail, L.R.C.P., and M.R.C.S., Cairo; W. W. Jameson, M.D.Aberd.; J. S. Lukis, M.D.Lond., St. Barts.; C. H. G. Ramsbottom, M.D., Vict., Owen's Coll., Manchester.

NEW LICENTIATES.

Licences to practise physic were granted at this meeting to the same candidates, who were also admitted to membership of the Royal College of Surgeons, and whose names are given in another column, together with the following:—C. H. Gould, A. S. Phillips, D. V. Pickering, D. L. Spence.

DIPLOMAS IN PUBLIC HEALTH.

Diplomas in Public Health were granted jointly with the Royal College of Surgeons to the following:—E. M. Balthasar, L.R.C.P., M.R.C.S., A. F. Bell, M.B., B.S.Melb., W. Bethune, M.B, C.M.Edin., H. S. Blackmore, L.R.C.P., M.R.C.S., W. H. Butler, L.R.C.P., M.R.C.S., J. A. Delmege, L.R.C.P., M.R.C.S., H. S. Dube, L.M. and S.Punjaub, W. R. Dunstan, M.B.Lond., L.R.C.P., M.R.C.S., A. L. Dykes, M.D.Edin., R. P. Garrow, M.D.Aberd., A. Gaskell, F.R.C.S., L.R.C.P., S. E. Gill, M.D.Lond., L.R.C.P., M.R.C.S., C. L. Goode, M.B., B.S.Melb., C. S. V. R. Harwood, M.B., B.S.Lond., L.R.C.P., M.R.C.S., A. A. Ismail, L.R.C.P., M.R.C.S., R. G. Johnson, M.B.Lond., L.R.C.P., M.R.C.S., P. M. Keane, L.R.C.P.&S.I., G. A. Kempthorne, L.R.C.P., M.R.C.S., N. M. Leys, M.B., Ch.B.Glas., C. H. Lilley, M.B., Ch.B., J. A. S. Phillips, L.R.C.P. and S.Edin., L.F. and P.Glas., E. S. Phipson, M.B., B.S., Lond., L.R.C.P., M.R.C.S., T. W. W. Powell, Capt., I.M.S., L.R.C.P., M.R.C.S., *L. W. Pugh, M.B., Ch.B.Edin., B. Rai, L.M.S., S. Ram, M.B., H. G. Sherren, L.R.C.P., M.R.C.S., G. H. Stevenson, M.B., Ch.B.Edin, J. Taylor, M.D., Capt., I.M.S.

*Under the Medical Act, 1876.

St. Thomas's Hospital, London.

The following House Officers have been appointed:—

Casualty Officers and Resident Anæsthetists.—W. J. Hart, B.A., B.M., B.Ch.Oxon.; M. J. Petty, B.A.Cantab., M.R.C.S., L.R.C.P.; F. McG. Loughlane, M.R.C.S., L.R.C.P.; E. N. Butler, B.A.Cantab., M.R.C.S., L.R.C.P.; A. L. Sutcliffe, B.A., M.B., B.C.Cantab.; H. C. Attwood, B.A.Cantab, M.R.C.S., L.R.C.P.; W. B. Foley, M.B., B.S.Lond.; A. Viney, M.R.C.S., L.R.C.P.

Casualty Assistants.—E. L. K. Sargent, B.A., M.B., B.C.Cantab.; L. G. Bourdillon, M.R.C.S., L.R.C.P.

Resident House Physicians.—H. P. Dawson, B.A. Cantab., M.R.C.S., L.R.C.P.; E. Wordley, B.A., M.B., B.C.Cantab.; S. G. Askey, B.A.Cantab., M.R.C.S., L.R.C.P.; D. B. I. Hallett, M.A., M.B., B.Ch.Oxon.

Resident House Surgeons.—F. E. Daunt, M.B., B.S. Lond.; W. J. F. Symons, B.A., M.B., B.C.Cantab; P. G. Doyne, B.A.Oxon., M.R.C.S., L.R.C.P.; L. N. Reece, M.R.C.S., L.R.C.P.

House Surgeon to Block S.—P. H. Mitchiner, M.B., B.S.Lond., F.R.C.S.Eng.

Obstetric House Physicians.—A. R. Chavasse, B.M., B.Ch.Oxon.; F. J. Humphrys, M.B., B.S.Lond.

Ophthalmic House Surgeon.—G. N. Brandon, M.R.C.S., L.R.C.P.

University of Oxford.

The following candidates have satisfied the examiners for the Diploma in Ophthalmology:—Harriet R. D. Ford, David Horgan, Khursedji N. Karanjia, George C. L. Kerans, George H. Oliver, David D. Paton, and Alexander C. Reid.

University of Cambridge.

The following have passed Part II. of the examination for the Diploma in Psychological Medicine:—Emma Mary Johnstone and R. C. Monnington.

Society of Apothecaries of London.

The diploma of the Society has been granted to the following candidates, entitling them to practise Medicine, Surgery and Midwifery:—S. H. Andrews, G. E. Cuttle, H. E. B. Finlaison, A. Lowndes, and T. B. Paul.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

L. S. A. (Worthing).—Many persons suffer from headaches caused by the strong scent of flowers, such as narcissi and hyacinths, but these effects are slight as compared with the actual dermatitis frequently produced in susceptible individuals by contact with certain plants, such as the *Rhus toxicodendron*, *R. vernicifera* and the *Primula obconica*.

Dr. S. B. (London, W.).—Striking proofs have been given in our own military service in India of the efficacy of antityphoid inoculation, and there seems good reason to hope that with the gradual disappearance of the prejudice against inoculation the medical authorities in that country will soon be able to congratulate themselves on results as favourable as those shown by recent returns of the U.S.A. army.

Dr. W. S. T. (Toronto).—It is believed by some authorities that radium emanation causes an increase in the excretion of urea up to 34 per cent., and uric acid up to 14 per cent.

Ubique.—Although syphilitic lesions are more promptly relieved by salvarsan than by mercury, the latter is considered an essential supplement to the treatment.

Scrutator.—It has been stated on the authority of Sir Almroth Wright, that the injection of anti-streptococcic and anti-staphylococcic vaccines in the early stages of variola will prevent the subsequent pus-infections, to which mainly the fatality of the disease is due. Some cases in which the treatment was adopted pursued so benign a course as scarcely to be distinguishable from varicella.

Dr. A. H. Thomes.—Rectal suppositories of adrenalin chloride have a useful effect in stimulating the bladder to expel the urine in cases of hypertrophy of the prostate.

Appointments.

Donaldson, Malcolm, M.B., B.C.Cantab., Demonstrator of Midwifery in the Medical School of St. Bartholomew's Hospital, the election dating from October, 1913.

Eccles, McAdam, M.C.Lond., F.R.C.S.Eng., Surgeon to the London Temperance Hospital.

Evans, Arthur Henry, M.S.Lond., F.R.C.S.Eng., Surgeon to the London Temperance Hospital.

Faill, Charles James Campbell, M.R.C.P.Edin., L.R.C.S.Edin., Tuberculosis Medical Officer for the City and County of Bristol.

French, J. Gay, M.B., M.S.Lond., F.R.C.S.Eng., Surgeon in Charge of the Throat, Nose, and Ear Department at the Royal Free Hospital.

Hepburn, M. L., M.D., B.S.Lond., F.R.C.S.Eng., Ophthalmic Surgeon to the Royal Free Hospital.

Higgins, T. Shadick, M.D.Lond., D.P.H.Camb., Medical Officer of Health of St. Pancras.

Hosford, John Stroud, M.R.C.S., L.R.C.P.Lond., Ophthalmic Surgeon to the London Temperance Hospital.

McClure, James, F.R.C.S.Eng., Surgeon to Out-patients at the London Temperance Hospital.

Miller, Charles Hewitt, M.D.Cantab., M.R.C.P.Lond., Assistant Physician to the London Hospital.

Paterson, H. J., M.C.Cantab., F.R.C.S.Eng., Surgeon to the London Temperance Hospital.

Payne, John Ernest, M.B., B.C.Cantab., F.R.C.S.Eng., Honorary Surgeon to the Torbay Hospital, Torquay.

Metcalfe, James, M.D., Medical Officer in charge of the X-ray Department of the German Hospital, London.

Vacancies.

Glasgow District Mental Hospital, Gartloch, near Glasgow.—Medical Officer (Junior). Salary £150 per annum, with board, lodging, and laundry. Applications to the Medical Superintendent, Gartloch, Gartcosh.

Ayrshire Sanatorium, New Cumnock.—Medical Assistant, as Assistant to the Resident Medical Officer. Salary £150 per annum, with board and rooms in the Sanatorium, etc. Applications to Mr. Robert Welsh, Solicitor, 42 Sandgate, Ayr.

Preston Royal Infirmary.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to Mr. Walter Davies, Secretary, 5 Winckley Street, Preston.

Swansea General and Eye Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and attendance. Applications to W. D. Hughes, Secretary.

North Riding Infirmary, Middlesbrough.—Senior House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to Charles Postgate, Secretary-Superintendent.

Cumberland and Westmorland Asylum, Garlands, Carlisle.—Junior Assistant Medical Officer. Salary £180 per annum, with board, apartments, and washing. Applications to the Medical Superintendent, Garlands, Carlisle.

Bradford Royal Infirmary.—House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to J. J. Barron, Secretary-Superintendent.

Dewsbury and District General Infirmary.—House Surgeon. Salary £120 per annum, with board, residence, and laundry. Applications to Edward Hemingway, Secretary.

Park Hospital for Children, Hither Green, London, S.E.—Assistant Medical Officers (two). Salary £150 per annum, with board, lodging, and washing. Applications to the Clerk to the Metropolitan Asylums Board, Embankment, London, E.C.

City of Liverpool Infectious Diseases Hospital.—Assistant Resident Medical Officer. Salary £120 per annum, together with board, washing, and lodging at the Hospital. Applications to the Chairman of the Port Sanitary and Hospitals Committee, Town Clerk, Municipal Offices, Liverpool.

Births.

Dick.—On July 26th, at "Morven," Sevenoaks, the wife of R. J. Dick, M.D., of a son.

Dominy.—On July 31st, at Southampton, the wife of G. H. Dominy, M.R.C.S., of Milton Abbas, Dorset, of a son.

Gabb.—On July 31st, at 13 Cornwallis Gardens, Hastings, the wife of Harry Gabb, B.A, M.B., B.C., of a daughter.

Gray.—On July 25th, at Exmouth, to Dr. R. W. and Hilda Gray (nee Mummery)—a son.

Passmore.—On July 29th at "Carlton House," Burbage, the wife of Dr. J. E. Passmore, of a daughter.

Paul.—On July 26th, at Ardbeath, 31 Melrose Avenue, Wimbledon Park, the wife of William Paul, M.B., of a daughter.

Woodwark.—On July 31st, at 38 Queen Anne Street, Cavendish Square, W., to Dr. and Mrs. Stanley Woodwark—a son.

Marriages.

Park—Bevan.—On August 2nd, at St. Cuthbert's Church, Philbeach Gardens, Edwards A. Park, M.D., of Johns Hopkins University, Baltimore, to Agnes, only child of the late A. Rawlinson Bevan, Esq.

Scott Holmes—Willey.—On July 29th, at St. Mark's, Reigate, Basil Scott Holmes, B.A., Registrar of the Architectural Association, son of Chancellor Scott Holmes, Canon of Wells, to Barbara Jesse Willey, youngest daughter of Henry Willey, Esq., M.B., F.R.C.S., of Reigate, and granddaughter of J. Scott, Esq., late of Albyfield, Bickley.

Deaths.

Bentall.—On July 29th, at 13 Roe Lane, Southport, Basil William, the infant son of Dr. and Mrs. Bentall, aged 18 days.

Coxwell.—On August 1st, at Godalming suddenly, of meningitis following influenza, Laurence Blake, the youngest child of L. D. and C. F. Coxwell, M.D., of Dulwich, aged 14 years.

Hodgson.—On July 25th, at 166 Peckham Rye, Robert Hugh Hodgson, M.D., L.R.C.P.Edin., M.R.C.S.Eng., ex Vice-President British Gynæcological Society, son of the late Captain C. G. Hodgson, Grenadier Guards, and grandson of Field-Marshal Studholme Hodgson.

Hollingsworth.—On August 1st, at Findern Lodge, Spring Grove, Isleworth, Surgeon-General Thomas Smith Hollingsworth, A.M.D., aged 85.

Kempe.—On July 31st, John Arthur Kempe, F.R.C.S., Edgbaston, Birmingham, aged 62.

Robinson.—On July 28th, at Lydd, the result of an accident, John Charles Reynolds Robinson, M.R.C.S., L.R.C.P., Major R.A.M.C. (T.F.), attached to the 1st East Anglian Brigade, R.F.A., aged 42.

Russell.—On July 26th, in Dublin, Arthur Willoughby, retired, Fleet Surgeon, R.N., son of the late Lieut.-Col. Francis Russell, Madras Army.

Simpson.—On July 31st, at Thornton Heath, Robert Arthur Simpson, Surgeon, formerly of the Royal Navy, and of New South Wales, aged 60 years.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, AUGUST 13, 1913. No. 7.

NOTES AND COMMENTS.

Public Health and the Congress.

ONE of the most striking facts of twentieth-century civilisation is the position occupied by medicine as a factor in the State control of public health problems. It is true that medical representation in Parliament is numerically small, but, nevertheless, this little section is sufficiently great to exercise an important influence both in the framing and the administration of laws affecting the health of the nation. Never was any Government in such a receptive mood as the present one in this country is to-day, nor, indeed, have there been such urgent matters vitally affecting the national health discussed by such a representative meeting of the medical profession as the International Congress of Medicine which concluded its sessions yesterday afternoon. If evidence were needed as to the interest in preventive medicine taken by the Legislature, one has only to point to the National Health Insurance Act, now in working order, and to the activity shown by the State all over the country with regard to the treatment and prevention of tuberculosis. There yet remains one omission, and that a most important one. What has been aptly termed a "conspiracy of silence" as regards venereal diseases has at last been broken through by the publication a few weeks ago in two daily papers of a striking letter, signed by some forty well-known members of the medical profession, demanding the appointment of a Royal Commission to inquire into the best means for preventing and dealing with these diseases. This letter was endorsed at a meeting of the Representative Body of the British Medical Association at Brighton last month. The question of the State control of syphilis was discussed last Saturday at a joint meeting of the Sections of Dermatology and Syphilography and Forensic Medicine of the Congress.

The Suggested Royal Commission.

THE ravages of syphilis are well known to all medical men, and that it is the greater danger to the community because its existence is ignored is all the more reason why a Royal Commission on venereal disease should be speedily appointed by the Government. As the letter referred to above states, there are in London alone 40,000 new cases of the gravest forms of the disease every year, and in the United Kingdom as a whole 130,000 cases. For the sake of the public health it is high time that something were done to check the dire effects of venereal disease in both sexes by awakening the public conscience as to the terrible gravity of the present situation. There is nothing to be gained by preserving a mysterious silence any longer with regard to syphilis and allied diseases—in fact, the time is now peculiarly appropriate for facing the facts and bringing them prominently before the public. The profession has much cause for gratitude to the editors of the *Morning Post* and the *Pall Mall Gazette* for inserting the appeal, and now that a resolution was passed at the Congress urging the Governments of all countries there represented to institute a system of confidential notification of syphilis and to make adequate provision for the diagnosis and treatment of the disease, it is earnestly to be hoped that the suggestion as to the appointment of a Royal Commission, the members of which should include a substantial majority of medical men, may receive the most careful attention of the Legislature. At any rate, the profession of this country has done its duty by inducing the lay Press to drag the matter into the common light of day so that it can be fully discussed and an organised effort made to combat venereal diseases and to reduce the mortality directly attributable to them. From the point of view, too, of therapeutics, having regard to recent discoveries in syphilology, it becomes an absolute necessity to ensure that every infected person shall receive the treatment which modern medicine has found to be the most efficient. Then, and only then, shall we be able to congratulate ourselves upon one of the results of the 1913 International Congress of Medicine.

Transfer of Patients from General to Union Hospitals.

LAST week we gave some particulars of an attack on a Dublin Hospital for sending an applicant for admission to the Union Hospital instead of admitting him to its own wards. Some of the Guardians of the North Dublin Union, apparently not satisfied with the complete vindication of the medical staff of the Hospital, as a result of the inquest, are attempting to stir up public feeling again. As is customary in Dublin, during the summer some of the wards of Jervis Street Hospital were closed for cleaning purposes. It was necessary, therefore, to dispose of their occupants; those who were fit to go home were sent home, those who could not leave hospital were transferred to another ward, whilst in a few cases it was considered best to send the patients to the Union Hospital as they still required nourishment, if not some supervision. As it is obviously impossible to accommodate every patient in general hospitals till he dies or is perfectly recovered, such a redistribution of cases is a necessity. Moreover, even with all the wards open, the medical staff must send out the patients to whom hospital is least beneficial, in order to admit those for whom it is essential. It is very easy to imagine the conditions that would determine the turning away of a sick person for the benefit of an extremely urgent case. The case in point was stated by the Guardians to be one of pneumonia. But it appears that one of the Visiting Physicians gave his permission to the patient to leave hospital. Now, pneumonia as a word is a generic term, so it is very probable that the case was simply one of chronic bronchitis; in fact, the action of the doctors makes that practically certain. It seems to us that the Guardians of the North Dublin Union have misunderstood the action of the medical staff of Jervis Street Hospital, and that failing real ground for complaint they are raking up misinterpreted facts before the public. Are all sick persons to be kept in general hospitals for ever? Can any general hospital turn itself into a home for incurables? for that is the only way it can avoid sending out people who are ill.

LEADING ARTICLES.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

It is no exaggeration to say that the sessions of the Seventeenth International Congress of Medicine, both general and sectional, which terminated yesterday, have proved the most important of any medical gathering in the history of the present generation. Never before have there been assembled so many masters of modern medicine, men whose names are known and honoured wherever scientific medicine is practised. We have accorded our confrères from beyond the seas a real British welcome and they have placed before us the results of their original investigations in every department of medical science. Such an occasion as this demonstrates more forcibly than anything else the real catholicity of medicine, for, as Sir Edward Grey aptly remarked, in welcoming the Congress on behalf of His Majesty's Government, science, in the true sense of the word, is international; it may have controversies, but they are not national controversies. The official recognition accorded to the 1913 Congress is noteworthy in that an eloquent tribute was paid by Lord Morley at the Government banquet to the influence of medicine in the political and social field in the United Kingdom. That medicine is now regarded by the legislature as a practical and powerful force in the framing and administration of laws is certainly a striking sign of the times, and, seeing the important resolutions carried by close on 8,000 Congress members, the Governments of some thirty communities all over the world may well pause to consider their responsibilities in connection therewith. The first of these resolutions dealt with vivisection, and ran as follows: "That this section records its conviction that experiments on living animals have proved of the utmost service to medicine in the past and are indispensable to its future progress. That accordingly, while strongly deprecating the infliction of unnecessary pain, it is of opinion, alike in the interests of man and of animals, that every facility should be given to competent persons for the performance of such experiments under adequate supervision." Professor Harvey Cushing, who gave the Address in Surgery, pointed out in a spirited fashion the great alleviation of human suffering which has resulted from the practice of experimenting upon living animals. Another resolution was "That, sensible of the ravages wrought by syphilis in the health of the community, and deploring the inadequacy of existing facilities for checking its dissemination, the International Medical Congress calls upon the Governments of all the countries here represented—(1) To institute a system of confidential notification of the disease to a sanitary authority, wherever such notification does not already obtain. (2) To make systematic provision for the diagnosis and treatment of all cases of syphilis not otherwise provided for." Such a resolution, coming at a time when an inquiry has been demanded by some forty eminent members of the profession in this country to investigate the facts relating to venereal diseases and their prevention, cannot fail to produce a deep impression upon the Government. That twenty-three sections and three sub-sections were necessary to carry on the work of the 1913 Congress, as against fifteen in 1881, is an evidence of the growth of medicine within a single generation. In the President's Address, delivered by Sir Thomas Barlow, which will be found in full in another column, we have a succinct *résumé* of the progress of medical science since the last Congress, and we need only refer here to bacteriology, radiology, vaccino-therapy, and electro-therapeutics, not to mention the relations of medicine to public health, especially in connection with tropical diseases, to show what degree of expansion and specialisation has been reached during this period. But there remains with us always the question of prognosis in disease, and Professor Chauffard, whose thoughtful Address in Medicine we also publish, has shown that recent progress in pathology and therapeutics has considerably modified the prognosis of many disorders in a remarkably short time. The greatest impression left by the 1913 Congress will be, perhaps, the re-adjustment of many of our former conceptions, notably the changed attitude of the profession with regard to the relations between medicine and surgery, which can no longer be considered antagonistic, and also in respect to the influence of medicine upon the national health. Provided with such a powerful stimulus, it is earnestly to be hoped that the Government will feel its responsibility in connection with the memorable resolutions passed by the Congress and win for itself lasting fame by promptly acting thereupon.

IRELAND AND THE MEDICAL BENEFIT.

The Report of the Medical Benefit Inquiry Committee, issued last week, deals with only a small part of the subjects included in the terms of reference. Those terms had to do not only with the question of the extension of the medical benefit of the National Insurance Act to Ireland, but with the much larger question of the changes required in the present system of medical relief in the event of such extension. In other words, the committee was directed to deal with the entire question of medical poor law reform. This part of its duties has been altogether shirked by the majority of the committee, and is only referred to in allusive terms. Moreover, the committee has not even come to grips with the immediate question of the extension of the medical benefit. Recognising the complexity of the problem, it has only considered in any detail the question of the extension of the benefit to industrial areas, and it is worth noting that it received no evidence from any industrial areas outside the limits of the county boroughs, though the majority report proposes to deal with such areas. It must be said at once that both on public and on professional grounds the proposals of the majority of the committee must be met with determined opposition. The public grounds of opposition cannot be better stated than in the minority report of Dr. Stafford. Speaking of the suggestion made as to the question of administering the benefit, he says:—"The recommendation to place a weapon in the hands of the Insurance Committees or societies by which they might impose terms on certain doctors which the body of the medical profession after prolonged discussion has decided to be inadequate, is not, in my opinion, a suitable means of obtaining a satisfactory medical service for the insured." He proceeds to consider the report from a more purely professional point of view. The suggestions made in the majority report are much what we expected. The majority of the committee recommend that the same sum per head, *i.e.*, 8s. 6d., should be provided for the medical benefit as in Great Britain; that the money should be handed to the societies to make their own arrangements for providing medical attendance either for members and dependents or for members only, as they think fit; or failing such arrangements, to give other benefits to the value of the additional contributions; that these arrangements should cover the county boroughs and certain other undefined industrial areas. These recommendations require only to be stated to receive uncompromising opposition on the part of the medical profession. The majority of the committee, in fact, openly advocate the establishment of a "blackleg" service under the control of the societies. They recognise that the money is not sufficient to lead to an agreement with the profession as an organised body, and that, therefore, the Government is not in a position to promise a medical service of the kind required with the funds at its disposal. But, they add, "the societies can attack the problem in detail. An individual society can, if it fails to make terms with the profession as a whole, appoint its own medical officer." In other words, the societies can establish a "blackleg" service. We do not think that this is what the insured people of Ireland require. It is worth quoting Dr. Stafford's perfectly accurate statement of the reasons why the Conference between the friendly societies and the profession led to nothing:—"The failure to come to terms was, in my opinion, due to the fact that the societies demanded as a *sine qua non* the inclusion of the dependents, and they had not at their disposal sufficient money to pay the doctors reasonable remuneration for the extra work imposed upon them. If the societies had been content to proceed on the same lines as in England, Wales and Scotland, and had confined their proposal to insured persons only, there would have been no difficulty in arranging terms with the medical profession in Ireland." Our position is simple. We are willing to accept service on the same conditions as our brethren in Great Britain; we are not willing to do two and a half times as much work as our brethren in Great Britain for the same money; we are not willing to accept service under the societies. If the Government determine to carry out the recommendations of the majority of the committee, it may succeed in establishing a cheap and nasty medical service. It cannot be too strongly emphasised that the public will get exactly the sort of service it is willing to pay for, and when we speak of payment we mean not only the actual pecuniary remuneration, but the general conditions of service.

CURRENT TOPICS.

Cross Questions.

In these days when we must at least pretend to a pride in democracy, quantity usurps the power properly the prerogative of quality. If a thing obviously futile in the singular is repeated often enough it attains a practical importance that is not its intrinsic due. That is why we pay attention to the futile fulminations of the half-penny Press. The vitriolic vials of searing sarcasm are poured out on the Medical Congress. Penny-a-lining pundits propound portentous propositions and pause for a reply. The questions are lovely in their infantile ingenuousness. The omniscient scribe asks: "Can you cure a cold?" and "Can you prevent a child from having measles?" with an implied "num, expecting the answer 'no.'" Apart from the fact that an absolute affirmative would be an accurate answer to both these queries, the fact of asking them is an acknowledgment of the modern craze for results. "*Cui bono?*" is being everlastingly dinned into our ears. Results are reality, and methods only madness. If that is the way we are to be judged, Heaven help our judges. Men who have no thought for the morrow and no idea of an ideal are like Westinghouses on the wheel of progress. People may read their words, but the man who heeds them is like unto their perpetrator and a thing of no account.

Medical Examination of Workers.

We have repeatedly advocated the medical examination of all workers before they are accepted by employers. Freedom and justice are empty names when they apply only to one of two contracting parties. With the law as it stands at present the employer has no protection whilst the employee risks nothing and has everything to gain. Capital cannot exist apart from labour, nor can the converse obtain. It is a matter of great practical difficulty for the employer to prove that any indisposition of an employee does not arise from the work of the latter. When the workman dies the onus of proof as to cause of death lies chiefly with the employer. Nor is the present condition of affairs good from the employee's point of view and from that of public health, for it is to the workman's advantage to keep at work for a few months in order that he may be entitled to sickness and disablement benefit. It is obviously unwise to make it profitable for a sick man to work, if it can be prevented. If conscription has no other advantages it certainly has this, that every male undergoes medical examination and that an employer can choose sound men for his work. It is so obviously unscientific to determine the time of incidence of a complaint with no knowledge of the previous condition of the patient, that one wonders why general medical examination has not been introduced already. Of course, the amount of physical strength necessary varies with each trade, so no general standard of efficiency could be introduced, but there is nothing to prevent a girl with an ankylosed knee being an efficient typist. Medical examiners could be appointed for each type of employment, and one cannot imagine that the result could be anything but good.

The Modern Comprehension of Crime.

One of the most interesting discussions that took place at the Brighton meeting of the British Medical Association was that on crime and punishment in the Section of Medical Sociology. The shortest definition of crime was given by Dr. James Scott as "an offence against the social order." There is an analogy between crime and disease, for both are departures from the normal. The root of all crime, according to Dr. C. A. Mercier, is a determination to obtain gratification for oneself regardless of the cost to others. It is, therefore, quite logical to insist upon the suppression of crime, otherwise society would undergo destruction. Exactly how this suppression is to take place is, of course, a debatable point. Some mawkish sentimentalists would hob-nob with the criminal and tell him that he is not such a bad fellow after all, but is only an ill-used and misunderstood unfortunate. The real object of all punishment is ultimately preventive, being in the first place deterrent. In most countries there is a reaction against the older systems of harsh and almost vindictive punishment—in fact, it would seem as though there is a danger in some quarters of too much leniency being exercised, for prison existence is fast becoming transformed into something like hotel life. Be that as it may, it must be admitted that the Borstal institutions have effected considerable reform in our prison system. Another important change which has not been in operation for very long is the preventive detention of habitual criminals in special institutions. If there were greater agreement between the medical and legal professions, especially in regard to the question of criminal responsibility, it is possible that the punishment would be better suited to the crime than is sometimes the case at present.

Yellow *versus* White Vaseline.

When white or bleached vaseline was first introduced many years since, there was a great outcry on the part of surgeons and dermatologists against it on various grounds. The protest fell on deaf ears, and nowadays the "purified" product is almost exclusively employed in medicine. It may, however, turn out that the pale vaseline is, after all, less therapeutically active than the crude product. To begin with, it is highly probable that the process of bleaching leaves chemical oxidising agents therein, and in any event we have Dr. Carrel's word for it that yellow vaseline is much preferable to the white variety as a preservative of living tissues in a state of suspended animation. Its value resides in the fact that it effectually prevents clotting of the blood in the vessels, besides preventing desiccation. The efficacy of its action may be inferred from the fact that skin preserved in this way can be used for grafts with every prospect of success many weeks, if not months, after.

Opium in China.

A white paper has recently been issued by the Foreign Office containing reports by Sir J. Jordan, His Majesty's Minister at Peking, respecting the opium question in China. The first despatch is dated May 26th last, and contains reports of the general position in several of the Provinces. The Minister thinks that on the whole it may fairly be said that the Chinese Government have shown signs of earnestness in the suppression of opium cultivation in the Provinces this year, and an advance in this direction has been made within the last three months. While making full allowance for their difficulties, Sir J. Jordan remarks, however, that he cannot but point out that a great deal remains to be done before the work of suppression can be considered as complete—notably in the Provinces of Yünnan, Kueichow, Kiangsu, Kansu, and Szechuan. Writing again on the second of last month, Sir J. Jordan enclosed copies of reports on journeys recently completed in Anhui, Hunan and Shantung, with a view to ascertaining the extent of poppy cultivation still existing in those Provinces. The despatch states that five Consular officers were detached for the work, and, accompanied by Chinese delegates of the metropolitan and provincial governments, they conducted a searching inquiry into the conditions of cultivation, consumption, and traffic in native opium. Their investigations failed to reveal any poppy crops within the area under inspection, and the Minister has informed the Chinese Government that, in view of the effective suppression of the cultivation and import of the native drug, the conveyance of Indian opium into the Provinces of Anhui, Hunan, and Shantung will now cease, in accordance with the terms of Article 3 of the Agreement of 1911. It is pointed out that these are the first tours of the kind which have been carried out by British and Chinese officers working together, and Sir J. Jordan is of the opinion that the good spirit and fellowship with which they have been conducted under arduous and trying circumstances reflects much credit on all concerned.

The Olfactory Sense in Medicine.

Though it is true that the sense of smell is not so highly differentiated in man as in some of the lower animals, yet instances of olfactory keenness in the human subject are not so very uncommon. The connection of certain odours with normal or pathological conditions of the body affords a most interesting clinical study, and this association may be of some service in the diagnosis of disease. In a comprehensive article upon the subject in the *New York Medical Journal*, Dr. Robert E. Coughlin states that probably most physicians and nurses use the sense of smell either instinctively or as the result of experience in diagnosticating disease or appreciating morbid conditions. Because it is difficult to set up an exact scientific standard of odours little or no attempt has been made in medical text-books to give olfactory diagnosis its rightful place among clinical methods. No one will deny the value of the "mousy" odour in favus, for instance, or that of the odour of acetone in the breath of diabetics. Each secretion and excretion of the body has its own particular odour which may be greatly modified both in health and disease. Every medical man is familiar with the characteristic urinous odour in cases of incontinence of urine, with the horrible stench associated with mercurial gingivitis or a neglected pediculosis capitis. The worst smell of all is said to be that produced in cases of gangrene of the lung. Certain general diseases, such as phthisis, acute rheumatism, diphtheria, and typhoid fever, may frequently be distinguished by the presence of particular odours not met with in other affections. One very often finds that experienced nurses are able to diagnose these and other diseases from the sense of smell alone, and, likewise, they are sometimes able to presage the fatal termination of some severe malady from the peculiar odour given forth by the patient just before death. To untrained nostrils these subtleties do not appeal, nevertheless, there can be no doubt as to the value of the olfactory sense in prognosis as well as in the diagnosis of disease.

An Anti-Climax.

A man from Frankfort has been charged with three interesting murders. In his bright, scientific, German way he married three wives—not simultaneously, but in due sequence, each after the demise of her immediate predecessor. The police, whose suspicions were aroused by three coincidental corpses, searched the house and found pure cultures of cholera and typhoid of a specially savage brand obtained from the Bulgarian war, which had been got from Vienna by the simple expedient of writing on notepaper bearing the address of an imaginary scientific institution. "The best laid schemes . . . gang aft agley," and though the latest reports state that the man admits the administration of cholera and sausage, no untoward results occurred. The body of his first wife has been exhumed and found to contain large quantities of arsenic. Perhaps it is well that the inefficacy of bacteria orally administered should be extensively advertised. It will save a lot of trouble to individual criminals, and *Gott sei dankt*, will staunch the impending flood of detective stories that, built on this bacterial basis, imminently threaten us.

Ills that Flesh is Heir to.

There is a theory which looks at cancer as a dissociation of personality—a kind of cellular forgetfulness, an anarchy which looses the activity of cells from the control of the corpuscular community. The cells have forgotten their debt to the aggregate and, adopting an attitude of *sauve qui peut*, thrust themselves in a reckless rabble through the bounds of the basement membrane, unmindful of their duties as part of an organised entity, and only remembering the casual individuality of their ancestral amœbæ. It is a luminous way to look at cancer, and suggestions have been made to transfer the thought to many of the mental ills that now beset us. We are to hold that the defective mind is merely primitive—it can climb only the first few branches of its own genealogical tree, and, therefore, traits we thought psychopathic are really evidence of the persistence of primordiality. It is all very interesting and explains a whole lot of things, if we sit down and think about it. The so-called "migratory impulse in children" is a throwback to the nomadic shepherd and the flocks, "after which his soul longed and his feet tramped." Childish ills, too, may be the pestilential sufferings of a stone-age adult. Measles were likely the scourge of the pre-Adamites as well as the modern Melanesians, and non-notifiable ills that people expose their children to for the sake of getting them over were, without doubt, the paleolithic plagues of our semi-simian sires.

The Vivisection of Dogs.

In the discussion that has been going on in the lay Press on the subject of excluding dogs from vivisection it seems to be assumed on all hands that the suffering inflicted by an operation or consequent upon the injection of a virulent culture is something which would never have befallen the animal were it not for the remorseless vivisector. But Nature is far more remorseless, Nature knows no pity! The dog who has escaped the attentions of the inquisitive physiologist must sooner or later die of injury or disease, failing which death from inanition consequent upon senile decrepitude must be his lot. Only the favoured few can hope to end their days comfortably in the euthanasia chamber at the Dogs' Home. It follows that vivisectors do not add one item, however infinitesimal, to the sum total of canine suffering; on the contrary no unnecessary pain is inflicted in the laboratory, whereas Nature distributes it broadcast, gratuitously, cruelly. What does it matter to the dog whether its ephemeral existence is brought to an end by an experimental injection of the tubercle bacillus or by hydrophobia contracted as the result of unhygienic alimentary habits, by being run over by a motor-car, or by transplantation of its vena cava to a cat? The path and the goal are exactly the same, only the date and the object differ.

PERSONAL.

H.M. the King has been graciously pleased to sanction the following promotions in and appointments to the Order of the Hospital of St. John of Jerusalem in England:—To be Knight of Grace, Major Henry Brydges Yates, M.D. (from Esquire), and Lieut.-Colonel Sidney Monckton Copeman, F.R.S., M.D. (form Honorary Associate). To be Esquire, Major Francis Leonard Vaux, M.D., A M.C. (Canada), and Lieut.-Colonel John Taylor Fotheringham, M.D., A.M.C. (Canada).

Dr. W. Lindsay Locke, M.B., Ch.B.Edin., has been appointed Senior Medical Radiographer to Guy's Hospital.

Dr. John Parkinson, M.D., B.S.Lond., M.R.C.P. Lond., has been appointed Special Assistant to the Heart Department of the London Hospital.

Dr. James Metcalfe, M.D.Brux., L.R.C.P. and S.Edin., has been appointed Medical Officer in Charge of the X-ray Department of the German Hospital, London.

Mr. H. Hayward Bywater, M.D.Vict., F.R.C.S. Edin., D.Ch.O.Liverp., has been appointed Honorary Assistant Surgeon to the Liverpool Eye and Ear Infirmary, and also Honorary Assistant Surgeon to the Eye, Ear and Throat Department of the Wigan Royal Infirmary.

Dr. Helen MacMurchy, of Toronto, whose work in connection with infant mortality, the care of the feeble-minded, and other public health questions is well known, has been appointed Assistant Inspector of Hospitals and Public Charities in Ontario, with special supervision over the feeble-minded.

FRENCH CLINICAL LECTURE

ON

OSTEOMYELITIS IN INFANTS. (a)

By PROF. E. KERMISSON, M.D.,

Professor at the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

Gentlemen,—We will devote our attention to-day to two little patients who have been admitted to our wards suffering from osteomyelitis.

Before doing so I should like to warn you against the old term, "osteomyelitis of adolescence," because it would be a grave mistake to suppose that osteitis is necessarily limited to adolescence. It is a disease which is met with in infants, in childhood, and even exceptionally in adults. Speaking generally, it may be met with at any period of osseous development, that is to say, until the age of twenty-five.

I present to you to-day these two cases to illustrate the occurrence of osteomyelitis in infancy. The first, a female infant, eighteen months of age, had previously been in excellent health. She was brought up at the breast, but she did not walk until late, and still presents traces of rickets. A fortnight since she had some stomach trouble and twelve days ago the mischief commenced in the left forearm. On January 10th the parents noticed what looked like a simple swelling in the left wrist, not accompanied by any reddening of the skin, but which steadily increased, spreading to the back of the hand and then to the forearm, thereupon assuming a frankly inflammatory appearance. Then, too, there was fever, the temperature oscillating round about 103-104° F.

On admission we found a red swelling, with obvious fluctuation, of the wrist and the back of the lower third of the forearm, especially on the radial side. The back of the hand was œdematous, but the movements of the joint were free. On examining the joint, I felt a sort of soft fremitus which made me entertain the possibility of detachment of the lower radial epiphysis, but this is of no moment, the point of interest being in reality the integrity of the joint since this disposed of the hypothesis of arthritis of the wrist. There was nothing to suggest lymphangitis or phlegmon, and I therefore concluded in favour of an osseous lesion, and as it was principally situated on the radial border, I diagnosed osteitis of the lower end of the radius.

This diagnosis was confirmed at the operation on the following morning. I made a vertical incision along the back of the forearm, and, having cut through the soft parts, I came upon a large abscess containing thick, homogeneous pus, some of which was set aside for bacteriological examination. With the grooved director I came down upon bare bone, and, pushing the director in farther, I made a counter opening on the skin on the opposite side of the limb. The fever at once subsided and the little patient seems to be improving rapidly.

Let us discuss this case for a moment, because it affords evidence of the fact that there is no such thing as chance in pathology.

Why should the osteomyelitis have fixed on the radius? Simply because it of itself is the column of support of the forearm. It is through the radius and not through the ulna that the weight is transmitted when we lean on the palm of the hand, and functional strain, as you know, attracts infection. But why should the infection choose the lower end of the radius? You know that of the intra-articular cartilages some are more active, more fertile, as Ollier used to say. Now, in the upper limb it is at the upper end of the humerus and the lower end of the radius and ulna that these "fertile" cartilages are found, and these cartilages are not only the points of election for osteomyelitis, but also of all bony lesions, exostoses, osteosarcoma, etc. It is not surprising, therefore, that the osteomyelitis should attack the lower end of the radius. I do not assert that it is never met with at the upper end, for I recently operated on such a case. I may mention incidentally that the latter is a very delicate operation, because, in order to get at the head of the radius, we have to cut through the supinator brevis, and there is great risk of damage to the deep branch of the radial nerve.

Osteomyelitis of the radius, indeed, is, however, a rather rare lesion, especially in infants. The few cases in my wards have always been in older children. In June and December, 1905, as it happens, I had occasion to lecture on two patients with osteomyelitis of the lower end of the radius, and in 1906 I advised my pupil, Mr. Delfosse, to select this as the subject of his thesis. In this thesis you will see that in the immense majority of cases this variety of osteitis runs its course without setting up arthritis of the wrist. This fact is explained by the anatomical relations of the parts. The epiphysial cartilage of the radius is not intra-articular. Only two of all the cases related by Mr. Delfosse in children, one two years and the other ten months of age, developed suppurative arthritis, but these were cases of primary invasion of the epiphysis, and, as you know, it is especially in young children that we get osteomyelitis of the epiphysis.

There is nothing particular to remark about the course of osteomyelitis. It may be complicated either by spontaneous fracture or detachment of the lower epiphysis of the radius. I may add that it is sometimes primary, sometimes secondary. Its importance from the orthopædic point of view lies in its ultimate consequences. The radius, for instance, may thereby have its development arrested while the ulna continues to grow, leading to the hand being thrown outwards on the forearm in a singularly disabling position.

The second case is that of a female infant, only six weeks of age, with osteomyelitis of the upper end of the right femur. She is the only child of healthy parents. At first brought up at the breast, she was subsequently handed over to a wet-nurse, who made up a deficiency of milk on her part by giving goat's milk. Everything went well for a fortnight after birth, but three weeks ago the way the infant began to scream when moved pointed to pain in the right hip, which was swollen.

On examination it was seen that the lower right limb was maintained in an attitude of repose, flexed, abducted and rotated outwards. The root of the limb was notably enlarged, red and infiltrated. On palpation internally we could make out a big, hard, œdematous mass, and at the back of the great trochanter we detected fluctuation, denoting a big collection of pus. For that matter the child presented other evidence of extensive suppuration: a bad general state, a high temperature, a yellow, waxen complexion, and a cachectic aspect, like that of old cancerous patients at the Salpêtrière. I should add that, on moving the joint, I found much latitude of movement, pointing to actual dislocation. I inferred from this that the abscess communicated with the interior of the joint *via* a hole in the synovial membrane.

(a) Clinical lecture delivered at the Hôpital des Enfants Malades, Paris, 1913.

On the morrow I plunged a trocar into the fluctuating area, giving exit to an ounce or so of greenish, thick, homogeneous, rather stringy pus, no doubt mixed with synovial fluid. The next day I was informed that the orifice of the puncture had become fistulous, so I decided to make a free incision; but on January 23rd, when about to do so, I found that all fluctuation had disappeared and there was only a trifling discharge of serum and grumous matter, so I held my hand.

At the present time the fever has fallen, the general health has improved, and the child is improving in appearance. Whether this intervention will suffice I cannot say, but it will always be time enough to make an incision when clearly indicated.

I mentioned just now that osteomyelitis of the radius was comparatively rare, but can we say as much of the second localisation? Assuredly not, for osteomyelitis in suckling infants always affects the big joints. That is the first point to be borne in mind. Then there is another. I spoke to you earlier of the integrity in most instances of the radio-carpal articulation in osteomyelitis of the lower end of the radius. Well, it is exactly the opposite in respect of this lesion, and here, again, the anatomical relations explain the reason. The neck of the femur does not form part, as you might be tempted to believe, of the epiphysis; it is the continuation of the upper end of the diaphysis and the epiphysis is only the globular head of the femur. The upper end of the femur therefore is intra-articular as well as its articular cartilage, and osteitis of this intra-articular extremity is necessarily accompanied by suppurative arthritis. It is of the greatest importance to bear this fact in mind, because it explains the highly improbable tales of so-called hyperacute coxalgia with grave constitutional symptoms and rapid death, which, in reality, are cases of osteomyelitis of the upper end of the femur with concomitant arthritis.

Familiarise yourself with the idea that osteomyelitis of the lower end of the radius is but rarely accompanied by suppurative arthritis and, on the contrary, that in osteomyelitis of the upper end of the femur suppurative arthritis is the rule. The reasons for this difference are anatomical, as I explained a few minutes since.

Klemm has published some recent statistics on osteomyelitis under conditions similar to our own—that is to say, in hospitals where children are admitted up to the age of fifteen. In ten years, out of 269 cases of osteomyelitis, there were 56 epiphysial cases, 43 being of the hip. In regard to age, 12 were infants under twelve months, 7 at one year, and 14 between three and six—*i.e.*, 33 cases under six years of age. As you see, osteomyelitis appears to be more frequent in early childhood, since, of 56 cases, 33 were before six.

As for osteomyelitis of the hip, the results are most striking. Of 31 acute cases, 19 were during the first three years of life, and of these 10 were during the first year. This confirms most strikingly what I said to you about osteomyelitis of the upper end of the femur being an affection of early childhood—of the suckling period indeed.

It is highly important for you to get to know osteomyelitis of the hip on account of its disastrous consequences if overlooked or mistaken. To begin with, on account of the softening of the bone tissue of the neck of the femur we may get coxa vara, though this is not what interests us most. The wearing away of the bone and the more or less complete destruction of the head may conduce to dislocation. Now, suppose we are dealing with an infant six weeks of age. His osteomyelitis has been treated by puncture or incision, the suppuration has ceased in a few weeks, and everybody has forgotten about what is taken to be a simple abscess. The infant, however, does not walk until very late—say, not until about eighteen months—then, too, he walks badly and wobbles most markedly. He is taken to a doctor, who, after listening to the history of the case, opines in favour of congenital dislocation, and, as a matter of fact, examination confirms that view, since there really is a dislocation.

But when you come to examine the hip very carefully you notice a tiny scar—say, in the neighbourhood of the trochanter. What is it? The friends then tell you that the child had a big abscess when six weeks of age, and thereupon you will understand the nature and cause of the dislocation. Moreover, you have only to radiograph the part. If it were a congenital dislocation you would find a perfectly constituted femur; whereas, if it be a case of past osteomyelitis, the head will, as a general rule, be totally destroyed.

You see how important it is to familiarise yourselves with these points from an orthopædic point of view, for it is obvious that, if no femoral head remains, it is idle to attempt reduction or to promise. Then, too, the prognosis in this variety of osteomyelitis is very grave. Such a lesion situated at the bottom of a deep, angular, joint cavity predisposes to stagnation of the pus, drainage is imperfect, and death occurs as the result of septicæmia.

As for treatment, Klemm advises resection of the head in every instance. I am of his opinion only so far as concerns older children and adults. I do not think this intervention necessary in young infants and sucklings. Though benign, so far as the result of the operation is concerned, it is potentially grave from an orthopædic point of view.

Bacteriologically the staphylococcus seems to be the most frequent agent of osteomyelitis, though the nature of the micro-organism does not, as Lannelongue suggested, furnish trustworthy prognostic data. Staphylococcus and streptococcus are alternatively virulent and benign. The only conclusion which we are justified in drawing is that osteomyelitis with the pneumococcus is usually benign.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by J. Hugh Thursfield, M.D. Oxon., F.R.C.P.Lond., Physician to the Metropolitan Hospital, Assistant Physician to the Hospital for Sick Children, Great Ormond Street, London, &c. Subject: "Enlargement of the Spleen in Children."*

A tablet was unveiled at Lancaster last week recording the place of birth of Sir William Turner, K.C.B., Principal and Vice-Chancellor of Edinburgh University, ex-President of the General Medical Council, and ex-President of the British Association. His fellow-townsmen, Professor Whewell and Professor Owen, are similarly commemorated.

ORIGINAL PAPERS.

APEX-TREATMENT
FOR
PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.Cantab., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

(Continued from p. 146.)

IV.

THE DATA FOR THE MECHANICAL METHODS OF PREVENTION.

Apex "inflation" and "deflation" are seen to be not merely a side aspect, but actively concerned in the entire local circulatory, no less than in the aerial function in disease as well as in health. Nevertheless, in our treatment they are still unsettled theoretical quantities, *à priori* reversible, and, in fact, abruptly reversed at its different stages as any contradictories might be which were of no account; and yet they are thought worth while, and even essential to reverse. This is an attempt to submit that question to the experimental decision of clinical observation.

For Prophylaxis apex-inflation is unanimously approved, on the basis of demonstration. The earliest observations are linked with the latest in the name of the "Freund-Hart theory." Though Prof. B. Stiller, of Budapest, looks upon the phthinoid chest itself as a post-natal development grafted by infantile tuberculosis upon some of the members of the larger group of "congenital asthenics,"—the congenitally "asthenic thorax" being identified by its *costa decima fluctuans* (Stiller), in addition to a short first cartilage (Freund)—he does not question the practical efficacy of early hygiene and apex-expansion as a protection against the apical affection. Hygiene deals with the tuberculosis, and apex-expansion with its localisation.

Granted that Römer may be right in regarding all phthisis as a severe re-infection of a subject previously marasmised, but only temporarily immunised, by a specially severe infantile infection, this does not detract from the clinical proof of the local mechanical immunising power of apex-expansion. This influence has been counter-tested by Bacmeister, who produces, in growing rabbits, by means of an apex-constricting wire, a *contra naturam* "apex" localisation of the artificial infection. The clinical data in support are not so precise, but of much wider range; and they cannot be disregarded as they converge to the conclusion that in the erect human species, whilst the lung is specially immune the apex is specially liable, and that its structural immunisation may require to be assured by specially local and mechanical means. In addition to the favourable results already achieved in juvenile prevention by gymnastic training, some of the evidence in question is derivable from a study of the physiological apex-immunities and of the pathological apex-immunities, which we shall proceed to mention.

The Relative Physiological Apex-Immunity, that of the robust, lies in the fortunate combination of a first-rate thorax and powerful heart with the benefits of an all-round hygiene. Among its factors, the mechanical one is represented by the apex features of good shape, good bulk, and good range of activity; and these we may provisionally accept as a standard of comparison for other immunities generally attributed to a pathological origin.

The Relative Pathological Apex-Immunities, which we notice on the strength of their traditional rather than of any ascertained statistical standing, are the familiar ones of surgical tuberculosis or scrofula, of mitral disease, of rachitis or kyphosis, all of which are juvenile, and of emphysema. They are all susceptible of a mechanical explanation, although emphysema alone has been so explained. *In Scrofula*, the general immunising effect of auto-inoculation does not of itself account for the fact pointed out by Sir F. Treves that whilst scrofulous manifestations may recur from a recurrence of depressing conditions, eventual pulmonary disease is much less common. We may still suspect that the wearing of long splints and bandages or of plaster round the chest may relatively favour apical expansion; whilst recurrent pyrexias may sufficiently exercise the heart and the apex to prove most often an efficient insurance against future apex risks.

In Mitral Disease, and particularly stenosis, Rokitansky attributed the relative protection to a blood overcharge. Bier, the clinician, founded upon that "anatomical" explanation the *rationale* of his entire mechanical method; and Kuhn, that of his own application of it to the lung. All three have overlooked a plausible "physiological" explanation. "Panting" stenosis *has to breathe* with the congested apex, when refused adequate service by the much worse congested base.

In the mysterious immunity alleged to belong to *Rickets*, and to kyphosis of rickety derivation, nothing could be more obvious than the mechanical factor. In its pigeon-breasted softening the rickety thorax becomes the obstacle instead of the help to respiration; and the same is true of the passive elevation of the diaphragm, so long as it remains uncorrected. The apex, least exposed to these influences, suffers least hindrance, and is called upon by the disease to assume temporarily a leading office in the respiratory function. At that plastic stage a few weeks will suffice to fashion the upper ribs and their attachments to an attitude and to a shape which in later life it takes years of emphysema to develop. Some of this change is permanent, and has to be taken into account at least as a part, if not as the essence, of any lasting apex-immunity.

V.

APEX-INFLATION OR APEX DEFLATION FOR TREATMENT?

The Argument from "Risk."—Imperfect apical inflation being a recognised characteristic of the "predisposed," and admitted by common consent and practice to be the chief mechanical ætiological objective for preventive correction, it is apparent that rest pure and simple has, in terms of the apex, the value of deflation. "Apical rest" means *relative "apical deflation"*; but when, as heretofore, it has to be obtained through the general rest cure, it means much else. The mechanical apex-rest is a vanishing quantity, as compared with the total body rest. How shall we assess to the one and to the other their respective share in any apex result, whether good or bad? We must remain in the dark on this practical point of treatment so long as the two agencies are not systematically studied each for itself; our conclusions remain merely inferential, on indirect evidence. The theoretical *onus probandi* is heavy for those who believe that the measure which is successful for prevention is bad for treatment. Still greater the uncertainty in timing that radical change, where no guiding landmark yet emerges between the "prepulmonary" tuberculosis and its pulmonary stage. Hitherto the proposition that the preventive help of apex-inflation turns to harm for treatment has no other support than the helpless *argument from the risk* of auto-inoculation and of strain. This might as well have stopped the whole history of our bacillo-therapy after the disasters of 1890; or might to-day be forbidding us to cure our late phthisis by pneumothorax. And yet at that early stage what does the risk amount to? At the apex the thoracic excursion is feeble at the best; how feeble must be the alveolar excursion. The stricken alveoli are plugged and immobile, surrounded by tissue which is not yet rotten and fragile; are they likely to give way and " open up " the lesion whilst the healthy alveoli bring to them all round the support of their inflation? That peripheral inflation and support is the acknowledged mechanism of the partial repair after pulmonary excavation; how much more efficient might it not be where there are no big gaps to fill? If, unknown to our examination, cavernules should have already formed, still served by a comparatively healthy bronchial outlet, shall we withhold from them at that time of election the helpful lateral pressure for evacuation and compression which is analogous to a " pneumothorax cure "? The risk of massive auto-inoculation is taken by Forlanini; here it could neither be massive or abrupt, and each successive inflation would likewise tend to reduce it. But the old prudential argument was not based upon auto-inoculation and was not very conclusive. This is its authoritative statement in Nothnagel's system (*a*): " For years I have absolutely banished forcible inspirations in the form in which they are generally prescribed, regarding them as nothing less than dangerous and harmful. I prefer to advise the patients to breathe in *slowly* and not too deeply, and then to breathe the air out again without effort, in order to further the removal of the products of expectoration. I, myself, and what is of no less importance, my patients are perfectly satisfied with the results. Brehmer, Volland and Liebermeister long ago gave warning against the dangers of pulmonary gymnastics."

The Arguments from Collateral Facts.—Largest in bulk is the testimony from the early and latent spontaneous cures, more numerous we are led to believe than the progressive cases of declared phthisis. These cases get well not through apical rest but through increased apical work, inasmuch as under the slight relative dyspnœa the usual avocations cost more respiratory effort; but chiefly perhaps owing to the usual prevalence of cough as a direct agent of apex-inflation. But the best argument is the demonstration afforded by artificial pneumothorax. The evidence is absolute, for there is only one lung, and that lung is inflated not partially or intermittently but steadily and to the utmost. The apex itself is the section least hampered in its expansion whether by the direct gaseous pressure or by the heart and mediastina which it displaces. In the successful cases its early lesions, so often present, and often even " open " lesions, get well under that extreme treatment; showing what " *unilateral breathing* " can do for the early stage. More advanced cases generally succumb; what else could we expect after depriving them of one third of their total breathing surface? The wonder is that they last so long; and this seems to be due to the help of inflation for a badly-damaged apex. They prove at the least the harmlessness of apex-inflation, even in the advanced stage. The others clearly prove its healing power in the earlier stages.

Lastly the experimental argument is now available. " Graduated labour " is a conclusive proof that apex-inflation does no harm; neither at the closed stage, nor at the healing stage of the late lesions. Then why further delay that simple and safe clinical experiment for the initial stage? Let us cautiously study whether we may not have been wrong, at least in a majority of cases, in systematically deflating the apex by rest, instead of giving it its cure by an initial " graduated system of *apex-activity*."

CHRONIC MEDIASTINITIS: ITS CAUSES, FORMS, SYMPTOMS AND TREATMENT.

By PROFESSOR C. LIAN, M.D.,

Director of Clinical Medicine at the Faculty of Medicine of Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

(Concluded from our last issue.)

TUBERCULOUS MEDIASTINITIS.

As a rule chronic tuberculous inflammation of the superior mediastinal tissue is discreet. It is accompanied by peritracheo-bronchial adenopathy and runs a very slow course. It very rarely gives rise to as striking a symptomatology as the variety due to syphilis, and in any event it is always very difficult to distinguish the troubles due to the glandular enlargement from those caused by the mediastinitis.

The inferior variety—chronic inferior tuberculous mediastinitis—which is particularly frequent in children, occurs in three principal clinical forms.

(1) *Mediastino-Pericarditis.*—This is the well-known clinical picture of tuberculous cardiac symphysis accompanied by asystole bearing mainly on the liver. We need only mention *en passant* the physical signs of cardiac symphysis—*viz.*, undulation of the chest wall, pluricostal systolic retraction in the precordial region and fixity of the apex.

(2) *Mediastino-Pleuritis without pericardiac symphysis but with hepatic asystole.*—In this form patients present the syndrome of hepatic asystole, but the asystole is provoked purely by the mediastinitis independently of any cardiac symphysis and is due to pressure on the inferior vena cava by bands of mediastinal fibrous tissue. The prognosis is said to be less gloomy than in the cases with symphysis. As these lesions often complicate tuberculous pleurisy they are usually associated with extensive pleural symphysis.

(3) *Mediastino-Pleuritis with Dextrocardia.* — Here right pleural symphysis associated with retraction of the thoracic wall and an atelectasic or sclerosed lung is accompanied by fibrous mediastinitis. Under the influence of these various processes the heart has been more or less markedly deviated to the right and fixed in this new position.

DIAGNOSIS.

The diagnosis of mediastinitis may be envisaged under three conditions:—

(1) In well-marked superior mediastinitis the syndrome is easily recognised. The only difficulty that presents itself is to determine the mediastinal affection which is causing the symptoms.

(2) In inferior mediastinitis in presence of hepatic asystole in which it is necessary to establish its mediastinitic origin.

(3) Lastly, in the abortive cases the diagnosis is particularly delicate when called upon to establish the fact that the pathological disturbances are of mediastinal origin and are due to mediastinitis.

(*a*) " Tuberculosis," by Prof. G. Cornet, 1899, English edition 1904, p. 540.

Superior Mediastinitis.

In presence of signs of obstruction of the superior vena cava or of one of its branches we are justified in suspecting mediastinitis. The respiratory signs are not as easy to interpret, and are apt in the first instance to direct attention to the throat, larynx or lungs. Examination of these organs and the, as a rule, dramatic intensity of the symptoms, generally enable us to steer clear of error. The only difficulty is to establish the cause of the mediastinitis.

In children we should, of course, at once suspect tracheo-bronchial adenopathy because superior mediastinitis, if present, usually accompanies the latter and may be masked thereby.

In an elderly subject our thoughts naturally turn to malignant tumours of the mediastinum, either primary or secondary. Associated cachexia would tend to confirm that suspicion.

Lastly, in the adult, in whom superior mediastinitis is most frequent, the diagnosis presents two aspects :—

(*a*) If the syndrome has come on rather rapidly we may suspect pericarditis with much effusion, and examination of the heart will show whether such is the case; a mediastinal pleurisy—fever, a latero-vertebral dull band (posterior effusion) or an increasing dull area over the heart would be in favour of pleurisy. But these physical signs are inconstant and difficult to make out, moreover, mediastinitis may itself be accompanied by a rise of temperature.

(*b*) In presence of a chronic process we have to eliminate three mediastinal affections—*viz.* :—

Tracheo-bronchial adenopathy, rarely marked enough to determine *per se* mediastinal troubles unless it happens to be associated with a malignant tumour in the neighbourhood. As for lymphadenia this could only be diagnosed clinically when the peripheral glands are similarly affected or the leucocytic formula is found to be modified.

A malignant growth in the mediastinum. In this case our diagnosis will be based especially on the state of the general health aided possibly by radiography.

Also, and especially, aneurysm of the aorta. When dilatation is associated with a syndrome of venous compression the former will in all probability have antedated the latter and is discovered on examination so that absence of the signs of aortic aneurysm in presence of venous compression is suggestive of mediastinitis. Much more difficult is the diagnosis of deep ectasia with compression of bronchi or nerves—in fact, it may be clinically impossible, in which case we must have recourse to radiography as the only means of making the distinction.

(2) In inferior mediastinitis our attention is awakened by a more or less pronounced syndrome of hepatic asystole. We must then examine the circulation and the lung for the cause of this asystole. We must bear in mind the possibility of mediastino-pericarditis, especially if there be undulation in the precordial region, fixity of the apex and systolic retraction of the thoracic wall. Absence of fixity of the apex would point in favour of inferior mediastinitis with or without external pericarditis.

(*c*) Lastly, in the abortive forms every conceivable error is possible, and in most instances the functional disturbance will be attributed to any other cause than mediastinitis. Consequently we must bear this possibility in mind in all cases of dyspnœa, pain, etc., for which no adequate cause can be discovered. In case of doubt or uncertainty have recourse to the X-rays, especially from the front and in the anterior-oblique position.

The appearances with the X-rays are as follows :—

(1) We may see round the large vessels in the superior mediastinum, or more frequently at the upper part of the clear median space, a mass varying in size from a pigeon's egg to that of a tangerine orange, unequally opaque, with ill-defined borders.

(2) Or we may make out fibrous bands crossing the mediastinum in various directions.

(3) Lastly, in inferior mediastinitis, we get a cardiac shadow bounded on both sides by a dark band of varying width. If there be symphysis we shall note the fixity of the apex. There is also the important sign discovered by Broadbent—*viz.*, if we examine a healthy subject in the sagittal position when he takes a deep inspiration the apex of the heart is seen to separate from the shadow of the wall; it seems to be beating in space. In presence of adhesions between the pericardium and the sterno-costal wall the apex does not separate therefrom but remains fixed even on deep inspiration.

The fact remains that the interpretation of radiographic appearances is a matter of great delicacy, and we have in particular to differentiate mediastinitis from other affections visible with the rays.

(*a*) Mediastinal tumours give on the screen an irregular mass pretty uniformly opaque, with sharp, irregular edges, the mass, on the whole, being bigger than that of mediastinitis.

(*b*) Tracheo-bronchial adenopathy is seen as little dark patches, the size of filberts, especially in the hilum of the lung and more on the right than the left. The diagnosis is difficult in superior tuberculous mediastinitis which is always associated with adenopathy. We shall suspect the existence of mediastinitis when the rest of the mediastinum presents a diffuse unequal greyish tint.

(*c*) Lastly, aneurysm of the aorta presents itself in two forms :—

If the aneurysm is not surrounded by mediastinitic thickening we get a rounded, well-defined uniformly opaque tumour, in the site of one or other segment of the aorta which can be seen to pulsate.

If there be concomitant mediastinitis, which is often the case, we see an opaque, rounded mass, with less well-defined margins which only pulsates in parts.

We may, as Sergent has pointed out, watch the transformation of a non-pulsating tumour into a pulsating one consequent upon a course of anti-syphilitic treatment, which has for effect to free the dilated vessel from its mediastinitis. Radiology, of course, does not always give as precise information as that just described, and the interpretation of the appearances on the screen is often a rather difficult matter. Nevertheless the X-rays afford the best available means of arriving at the diagnosis of an affection which, on account of its situation, escapes recognition by ordinary methods of exploration.

Ætiological Diagnosis.

It is important to try and discover the cause of the mediastinitis, especially in view of the possibility of a syphilitic origin. Speaking generally, in the child we get mediastino-pericarditis with hepatic asystole, mostly of tuberculous origin, though it may be mixed syphilis and tuberculosis, while in some instances it is rheumatic. Pure syphilitic mediastinitis is quite rare, but when present it is almost always the superior form.

In the adult, mediastino-pericarditis is less frequently met with and if present is probably tuberculous or rheumatic. Superior mediastinitis is almost always syphilitic. In any case we must make close inquiry for a history of syphilis, not omitting the Wassermann reaction. Even if the latter prove negative antisyphilitic treatment should be instituted if there remain the slightest uncertainty as to this.

Treatment.

There are two conditions in which we are called upon to institute energetic treatment of mediastinitis.

(1) In presence of syphilitic mediastinitis intensive treatment is called for, either with soluble mercurial salts, especially the cyanide of mercury, by the intravenous method, or with insoluble salts (especially calomel) or the arsenicals: hectine or salvarsan, in prudent doses.

The influence of the treatment is remarkable at the period of gummatous infiltration and that of invasion of the mediastinum; it is less efficacious when the mediastinitis is fully constituted.

(2) In mediastino-pericarditis freeing the heart by Brauer's method has yielded good results in some instances. It is indicated in cases of mediastinitis with pluricostal systolic retraction at the apex if the myocardium is not exhausted.

In tuberculous mediastinitis we have recourse to general antituberculous measures, but in most cases we shall only be able to employ palliative means and first and foremost patient must be placed at rest under hygienic conditions of life, because this alone often has an excellent influence.

PRESIDENTIAL ADDRESS (*a*)

By SIR THOMAS BARLOW, BART., K.C.V.O., M.D., F.R.S.,

Physician Extraordinary to His Majesty the King, President of the Royal College of Physicians, London.

Your Royal Highness, My Lords, Ladies and Gentlemen,—My first duty is to express our gratitude to His Majesty the King for graciously consenting to be the patron of the Seventeenth International Medical Congress. My second duty is to thank His Royal Highness Prince Arthur of Connaught for representing His Majesty on this occasion in the inauguration of the Congress and for the important address which he has given to us. My third duty is to acknowledge the kindness and the consideration of Sir Edward Grey, the Minister of Foreign Affairs of this country, for the official and hearty welcome which he has given to our foreign members.

In Praise of Famous Men.

A whole generation has passed away since the International Medical Congress last met in London. What a magnificent galaxy of talent in medicine, surgery, and pathology was gathered round the Prince of Wales, who was our Royal Patron at that time! It is fitting that we should follow the admonition of Ecclesiasticus and praise famous men and the fathers that begat us.

Our President, Sir James Paget, was a great clinical pathologist. His mind was stored with all that was then known of the morbid anatomy of surgical disease and injury, and of the family relationship of the different diatheses. He was a splendid teacher and possessed a lucid eloquence and a moral fervour not excelled by any of his contemporaries.

Jenner and Gull, Wilks and Gairdner, were our great teachers of clinical medicine. Each of them based his knowledge on the sure foundation of the *post-mortem* room and the hospital wards. We shall not see their like again, for their careers began before the days of specialisation, and they were amongst the last of the great general physicians of our time.

Hughlings Jackson was the philosophical exponent of the new neurology. Many of his forecasts were verified by the experiments of David Ferrier, of which I may say there was a remarkable demonstration at the 1881 Congress.

Jonathan Hutchinson was the patient, accurate recorder of the natural history of disease in multitudinous departments, and, characteristically enough, he was the organiser of our Congress clinical and pathological museum.

The pioneers of abdominal surgery—Spencer Wells, Thomas Keith, and Lawson Tait—were with us. Huxley, the most brilliant expositor of natural science of his time, discoursed to us on the relations of medicine and biology.

William Bowman, whose work on the minute anatomy of the eye was the foundation of modern English ophthalmology, was one of our most useful members.

Last of all the Englishmen whom I will mention was our great Lister, then in the zenith of his grand career. He has but lately been taken to rest in the fulness of years, and we commemorate him to-day in the medal of our Congress.

Our foreign brethren were not less illustrious in the bede roll of medical and surgical achievement.

Virchow, the Nestor of morbid anatomy, honoured and beloved by us as by his own countrymen, delivered a fine historical discourse on the value of pathological experiments. Volkmann gave a critical survey of the recent advances of surgery.

Robert Koch gave what may truly be called a path-breaking demonstration of the microbial findings in several morbid conditions, and he illustrated their characteristic growth on different organic media.

Von Langenbeck and Esmarch spoke for military surgery. Donders and Snellen for ophthalmology. Baccelli, Murri, and Pantaleoni represented Italian medicine. From the United States came Austin Flint, the accomplished physician and master of physical examination; Billings, prince of medical bibliographers; and Bigelow, the famous surgeon.

The great French school was represented by Brown-Séquard and Charcot, Lancereaux and Bouchard and Verneuil and a host of others; but there was one great Frenchman with us who towered aloft amongst all his contemporaries and who, though not a medical man, exercised by his discoveries a profound influence on the medicine of the world, and that was Louis Pasteur. In his address on vaccination in relation to chicken cholera and splenic fever he gracefully linked his most recent researches with the time-honoured labours of Edward Jenner on cowpox.

Time fails me to speak of other great and honoured names, but surely we may say there were giants in those days.

The Parting of the Ways.

Now let us realise to ourselves that the Congress of 1881 marked not the parting of the ways but emphasised the notable fact that the parting of the ways had already been passed. The times of superstition, of empiricism, and of transcendental speculation had vanished. But what of the period of accurate and detailed observation? That was neither superseded nor completed, but it was already supplemented and redirected into more fruitful channels by the new development of *experimental methods*.

If it had not been for the work of Pasteur, Lister, and Koch, which was expounded to us 30 years ago, how poverty-stricken would have been the output of medicine and surgery in this our Congress of 1913.

The great men—both observers and experimenters—of whom I have spoken were like mountain peaks towering above the plain of ordinary medical humanity, and we sometimes sadly ask where are the mountain peaks now? That is a shallow and unenlightened question. For indeed, thanks to the unremitting labours of workers in multitudinous paths, we have attained a glorious heritage, not of high mountain peaks and deep valleys, but a lofty and magnificent tableland of well-ordered and correlated knowledge.

Consider the bare fact that the 15 sections of the 1881 Congress have, by the inevitable specialisation and concentration of work, become 23 sections and three subsections in 1913; but so imperative is the demand for mutual conference that we have no less than 14 meetings arranged in which sections have found it desirable to discuss various problems in joint session.

(*a*) Delivered before the Seventeenth International Congress of Medicine on August 6th, 1913.

In what ways have we pursued and expanded the work of our fathers?

The Developments in Microbiology and Parasitology.

First, unquestionably in the development and application of bacteriology. Koch's great discovery of the life history of the tubercle bacillus was published in the year after the London Congress, and what an enormous body of knowledge has grown out of that discovery! We are learning to discriminate between the essential and causal factors of disease and the concomitants, such as combined and terminal infections. The by-products and the antibodies developed to neutralise bacterial life, of which we see the beneficent *rôle* in Nature's own cure of an acute specific disease, have been made to yield their share in two important methods of treatment—viz., serotherapy and vaccinotherapy. We have also faced the problem of strengthening the phagocytosis of the patient.

I need not dwell on the history of the Klebs-Loeffler bacillus and the causation of diphtheria, nor on the indubitable efficacy of the most important of all the antitoxins, nor on the singular parallelism between the bacteriological findings in a typical throat exudation with the ambiguous symptomatology which clinical observation reveals. Nor need I dwell on the extension of bacteriological investigation of typhoid which has been fruitful in new measures of prophylaxis and defence of the community.

We have learned something about the natural history of the ultra-minute organisms which as "filter passers" elude our microscopic investigation.

There are still great gaps in our knowledge of the infective organisms of the specific diseases, but it is a gain to have learnt from the study of recent epidemics that infantile paralysis must be grouped with the infective diseases, and, thanks to Flexner, we know many of the reactions of its elusive organism.

Great advances have been made in protozoology, in helminthology, and indeed in the whole subject of the relation of the parasites to the diseases of man and animals.

In tropical diseases these studies as well as bacteriology have brought about a rich harvest.

Mediterranean fever, plague, malaria, sleeping sickness, have all yielded more or less of their secrets. Sometimes the whole cycle of the disease has been discovered, rationalised in every respect, and its successful treatment has been evolved. In other cases, as in malaria, sleeping sickness, and yellow fever, where only parts of the natural history of the disease have been elucidated, nevertheless enough real knowledge has been acquired to enable important though sometimes costly hygienic measures to be successfully employed. Here it is fitting that we should offer our homage to our American brethren for their splendid hygienic work in Cuba, in Panama, in the Philippines, and in Costa Rica, and for the efforts which they are organising for a world-wide crusade against ankylostoma disease.

An Outline of Progress in Many Directions.

Chemical pathology has widened our knowledge and our resources, and the mystery of immunity has been to some extent illuminated.

The detailed examination of the morphological elements and the chemical characters of the blood and other body fluids has eventuated in the rewriting of some of our physiology, and the pathological extension of the knowledge thus gained has improved the diagnosis and the treatment of several diseases.

Thirty years ago Ord demonstrated to the Congress of that time examples of the disease which he had defined as myxœdema, but which, with surer instinct, Gull had described as a cretinoid state in adults. The gradual evolution of the doctrine of thyroid insufficiency and of its therapeutics is a model of induction. And this important discovery has given a great impetus to the whole study of internal secretions as well as to the employment of organic extracts, of which the last and most interesting is that of the pituitary body.

The empirical and then the experimental study of small variations in the ordinary diets of adults and children and infants in different social strata and in different countries has been fruitful in many unexpected ways. The great milk problem is still with us, but we have learnt the blunders of our early generalisations. Cleanliness in the milk-supply from start to finish has a far more exhaustive meaning than in days gone by.

The curious disease beri-beri, which some of us have long thought had parallelisms with scurvy, has been shown, at all events among rice-eating people, to depend on the loss of the nutritive material just internal to the pericarp which the ordinary process of milling removes.

The patient study of chronic alcoholism has opened up a new chapter in nervous diseases. The routine traditional employment of alcohol in disease has happily been largely discredited. The open-air treatment of all forms of tubercular lesions has had a wide indirect influence not only on the treatment of other chronic ailments but on the daily life of the people.

The recognition and radical treatment of oral sepsis due to damage to the gums in consequence of various disorders of teeth has been followed by remarkable benefit. A strong case has been made out for intestinal stasis as a cause of various forms of malnutrition and for operative measures in dealing with slight mechanical obstructions, and on this subject we hope for further evidence.

The additions to diagnosis yielded by X-ray exploration are like the creation of a fifth sense, and its curative applications and those of radium are the opening of a new chapter of therapeutics.

I venture to hint that medicine had now and then led to the rewriting of some chapters of physiology, and I may add that recent researches on diseases of the heart have led to the re-editing of neglected knowledge of the minute structure of heart muscle and of orderly and disorderly mechanism of its movements.

The Triumph of Surgery.

Of the magnificent triumphs of the surgery of this generation it is beyond my power adequately to speak, but I can refer to the wide fields opened up through the beneficent protection of Listerism. We are staggered by the reasoned and calculated audacity of our brethren when sinuses of the skull are drained, cerebral abscesses evacuated, cerebral tumours removed, the pituitary body even being investigated, when pleuro-pericardial adhesions are freed to the great relief of the heart, when different parts of the alimentary canal are short-circuited, and when one or other damaged viscus is removed either entirely or in part. The active coöperation of surgeons and physicians has gained for us some knowledge of what Moynihan and others have happily described as "living pathology," and we gracefully acknowledge the invaluable information of correlated symptoms, signs, and morbid conditions, and the statistics of comparative frequency which surgical experience has brought to the common store.

The supreme gain, after all, is that many more useful lives are saved than in the last generation, that the realm of grave and hitherto incurable disease is invaded on every side, and that the danger of operation *quâ* operation is retreating to a vanishing point.

It is impossible even to enumerate the varied ways in which medicine has coöperated with economics, social legislation, and philanthropy, which we sum up briefly as public health. The school-house and the scholars, the home of the poor, the colliery and the factory, the dangerous occupations, the sunless life of the mentally deficient, have benefited, and will benefit still more by its friendly invasion. And I venture to foretell that not many years hence every department of life and work shall be strengthened and purified and brightened by its genial and penetrating influence.

Conclusion.

Surely I have said more than enough to justify my contention that we have come into a goodly heritage, and that that heritage is like a lofty and magnificent tableland of knowledge and efficiency.

The gaps are being filled; we are no longer isolated, but are working side by side on adjacent areas which are inseparably connected. Every day we gain fresh help from the auxiliary sciences, and we realise more and more the unity and the universality of medicine.

Brethren from foreign lands, we thank you for the treasures new and old of observation and experiment and of a ripe experience which you have brought to this Congress for the common weal. I venture to affirm that the output of work of the Congress week in its 23 goodly volumes will astonish civilised countries by the amount of its solid work. I welcome you to our dear country, this ancient home of freedom, and I speak not only for the medical men of the British Isles, but for our brethren of the overseas dominions of this great Empire, who join with us in our cordial greeting.

May this Congress add to the common store of fruitful and useful knowledge, may it increase our good fellowship, our mutual understanding and coöperation, and may it help to break down the barriers of race and country in the onward beneficent march of world medicine.

MEDICAL PROGNOSIS: ITS METHODS, ITS EVOLUTION, ITS LIMITATIONS. (a)

By A. CHAUFFARD, M.D.,
Professor of Clinical Medicine in the University of Paris; Member of the Academy of Medicine.

Medical Prognosis! Is it not for us the daily problem, the anxious question which is constantly being put to us and which we put to ourselves? Ever since there have been sick patients and men who endeavour to relieve them and to restore them to health the same query has come up in every case: Will a cure be effected and by what therapeutical means? Prognosis and treatment, such were from the very first the two instinctive needs, the two immediate demands of the sick man. It was only at a later period, at a more advanced stage of medical culture, that the previous need became felt of diagnosis, which is a notion of purely intellectual and logical order. But if diagnosis has been the latest of our acquisitions, it has now taken its proper rank—the first. What physician, failing an accurate diagnosis, could venture on a prognosis or prescribe a treatment? An entirely modern idea—but one which should imbue our minds nowadays—is that of defining in each particular case the mutual relationship between those three fundamental elements of medical judgment: to know, to foresee, to act. Instinctive in the remote ages and, later, hesitating and seeking its way for a long period of time, the art of the physician tends to become more and more rational and systematic. It is the passing from art to science which our epoch is striving hard to achieve, often with success. In this uninterrupted evolution medical prognosis has not remained at a standstill; almost before our own eyes, and by the mere progress of contemporary science, it has undergone a gradual change. Its methods are being modified, its limitations are being carried further back every day; it is in a state of perpetual transformation. The present time is perhaps a suitable one for a general survey of our present position and for an appraisement of our acquisitions and desiderata. Such is the task I intend to attempt this afternoon before you. In the history of medical prognosis a large place should be ascribed to the Hippocratic era, and it is impossible to peruse those venerable writings without a feeling of deep admiration. In those days the physician, having no technical means of investigation at his command, could naturally have but a purely objective vision of his patient, but how penetrating was this vision, how skilful in grasping, coördinating, and interpreting the most minute details! What a searching study, what a constant scrutiny of the prognostic signs derived from the general condition of the patient and revealed by his facies, his position in bed, the movements of his hands, his breathing, his sweating, the state of his hypochondria, his dropsical swellings, his sleep, his urine, his stools, his vomit, his sputum. The book on "Prognosis" is only concerned with acute febrile diseases, but from its descriptions there is nothing to be omitted. "The best physician appears to be the one who knows how to know before"; such is the opening sentence of those admirable pages, so replete with clinical observation and medical philosophy. The body should always be considered as a whole and "all things should be judged by the study of signs and the estimation of their relative value." Such are the earliest sources to which we must ever revert. Those primordial notions have lost none of their value, and if we have added much we have parted with nothing. To this day those objective data are amongst the things that no clinician has the right to neglect, and the general impression they suggest at the patient's bedside leads us to pretty much the same prognostic conclusions as of old. For more than twenty centuries medical observation went no further and was restricted to the same elementary information until the day when new methods were added to the ancient practices, rendering possible the analysis of morbid disturbances. Thenceforth it is by the analytical method, with the help of a more and more penetrating *technique*, that medical inquiries progress; at the same time, more direct paths are open to prognosis. The modern era begins with Auenbrugger and Corvisart, who introduced percussion; with Laennec, the immortal inventor of auscultation; with Richard Bright, the creator of renal pathology. By those memorable discoveries the whole of medicine was at once transformed. Direct exploration became possible and efforts were made, in Laennec's own words, "to place in regard to diagnosis internal organic lesions on the same line with surgical diseases." To detect morbid changes in the living subject, to ascertain their degree and evolution, amounted to creating modern diagnosis and to giving prognosis more certain bases. It amounted also to demonstrating all the importance of a new science, pathological anatomy, which by its precise descriptions was going to corroborate and check clinical investigation and to direct medicine for a time towards the exclusive quest for lesions and for organic changes. To detect the lesion in the living subject, to identify it in the cadaver, and to deduce therefrom diagnosis and prognosis, such became the system of what was to be, for more than half a century, Organicist Medicine—a noble system which contained a large share of truth, but a narrow doctrine which tended to confuse the lesion with the disease which caused it. Need I add that if we are mere organicists no longer, we have nevertheless cast aside or forgotten no part of our predecessors' labour? Their work rests on the ancient fabric like a new geological stratum: on this stratum we have erected our modern constructions, more extensive and solid because they rest on larger and deeper foundations.

Advance in Technique.

The succeeding stage is marked by the influence of Claude Bernard's memorable work. With him pathology became deviated physiology, and disease became a disturbance of normal functions. We can recognise a morbid state and alter its probable course and consequences only if we are acquainted with the functional disturbances it causes. Without this essential notion how could we scientifically conceive the prognosis of a lesion of the heart, or liver, or kidney, or of the digestive or respiratory systems? Modern effort tends each day to greater advances along the paths opened up by Claude Bernard. With our improved instruments and laboratory *technique*, through our researches on the blood and body-fluids and on cytological reactions, we aim at gauging accurately the functional value of the various structures, the organic reactions of defence, the substitutions and compensations as well as the morbid synergical actions that take place in the human system. We physicians now strive to reason and to act as physiologists or, better still, as biologists. Our system of analysis makes use at the same time of the methods, now closely associated, of clinical medicine and of experimental pathology. It attempts to dissociate the infinitely complex problems of pathogenesis and the relationship between causation and secondary reaction. Nor can we arrive at a prognosis unless we take all those factors into account. Thorough diagnosis is almost one with scientific prognosis—at least, they constitute two closely connected ways of considering the same facts. If we remember all that we owe to contemporary hæmatology, to biological chemistry, to electrology, to radiology, we see how inseparable are the notions of diagnosis and prognosis thus obtained. Of equal importance, both for diagnosis and prognosis, are the temperature charts, the curves of urine and weight, the cardio-vascular tracings such as we have learned to take and interpret them from Marey and from James Mackenzie, the research in the blood of bactericidal properties, of agglutinins, of opsonins, the analysis, both qualitative and quantitative, of the various constituents of the serum. We arrive at the same conclusion if we consider the history of the leucocytes of the blood, with their chemiotactic and phagocytic reactions. Thus prognosis takes its immediate share in all the advances of diagnostic *technique*. This unceasing progress might make us imagine that there are no limits to its possibilities. It certainly is far from having reached its future boundaries, although we feel hemmed in by its present-day ones. These we shall attempt to define later.

(a) Abstract of the Address in Medicine delivered at the Seventeenth International Congress of Medicine, London, 1913.

REMOTE PROGNOSIS.

Medical prognosis, then, is a very complex matter necessitating the consideration of multiple criteria. Yet, if thus strictly considered, it would still be very incomplete inasmuch as it would not be taking the future into sufficient account. Now the future, to us physicians, is a preoccupation inseparable from the actual disease we are treating. This is a recent notion, it is true; for it was formerly imagined that a disease cured had no morrow. How great was this error and how far we now are from such a fallacy! Every day this question of remote prognosis arises, and it may be said to have made its appearance in science with the discovery by Bouillaud of rheumatic endocarditis. When Bouillaud took up the subject he was better armed than his predecessors. Through systematic auscultation of his patients and through *post-mortem* examinations he discovered and described rheumatic endocarditis. From that time on the prognosis of rheumatic fever was a different matter. Next to—or rather before—immediate prognosis now arose the question of remote prognosis. When we are called to a case of rheumatic fever the first thing we want to know is whether the heart is affected or not. Over and beyond the present illness we see and fear possible valvulitis; we try to avert it or to arrest its progress. The prognosis for the morrow takes the lead of the prognosis of the day. Let us consider an individual who has recently contracted syphilis. Do we for a moment imagine that after we have cured the secondary manifestations all is over and that our task is at an end? So little do we think so that in our apparently quite healthy subject we go on applying the treatment, we periodically ascertain the result of Wassermann's reaction, we keep in mind the possibility of late tertiary manifestations or of vascular syphilis in the shape of aneurysm, or again of one of those redoubtable cerebro-spinal localisations which constitute the darkest chapter in the history of syphilis. What we have just said of syphilis is equally true of tuberculosis, and those two great infections share between them a very wide field in pathology. The same might be said about gout, lead poisoning, alcoholism, etc. The acute disturbance disappears, but remote sequelæ are always possible. We might almost say that nothing is forgotten in the system, and that any alteration of a tissue or body-fluid leaves its trace. The discovery of anaphylaxis by Charles Richet affords the best demonstration of this fact, and we can repeat, in the words of that distinguished scientist, that "we have a humoral personality which makes each different from other individuals: this personality of our humours is due precisely to the various ingestions and intoxications which have affected our system and left an indelible trace." If we bear these notions in mind the scope of prognosis in morbid conditions is found to be remarkably extended. The pathological life of an individual appears no longer merely as an interrupted series of isolated episodes; but we try to discern its unity, to follow its continuous course, and to take into account the sudden and sometimes final deviations and the new pathological directions that may be given to the organism by an intercurrent disease.

THE SOCIAL ASPECTS.

Let us now extend a little farther the scope of our medical foresight. Our prognosis will then include the future of the patient's descendants. I cannot dwell at length on this very important aspect of my subject, but it is evident that the possibility of inherited syphilis or tuberculosis, that the transmission of abnormal humoral conditions, such as hæmophilia and congenital hæmolytical icterus, or of family taints like those so often met with in neuropathology, do aggravate those several diseases by placing them in the group of hereditary pathological conditions. This is not all. Next to the prognosis concerning the individual and his descendants we must consider collective prognosis. This is a question of a practical order which originated quite recently with the contemporary investigations on germ-carriers. Take, for instance, a school where a case of diphtheria has broken out. Will this be an isolated case or will it become the starting-point of a small localised epidemic? The preventive measures to be taken will depend to a great extent on our judgment, and we must be guided by the direct examination of the other children in the school. We must ascertain whether amongst them there are not some who are carrying Loeffler's bacillus in their naso-pharyngeal membrane or in their tonsils. The number of these bacilli-carriers will afford us precise and valuable information. It is also to direct examination that we must turn if in a military unit, company, or squadron there suddenly appears one of those cases, often so rapidly fatal, of cerebro-spinal meningitis. In cases of this kind the systematic quest for meningococci-carriers is immediately proceeded with, and it very speedily shows whether the cases observed are sporadic or whether they are the first signs of a more or less extensive epidemic. We are thus led to form the epidemiological prognosis, which to a certain extent remains distinct from individual prognosis. Finally, above the individual, the family, and the small communities there is the race, the human species considered as a whole. Now, considering as social diseases tuberculosis, syphilis, and alcoholism, if we search for the causes of aggravation or attenuation, shall we not be reaching the highest point that can be attained by medical prognosis? How far we thus find ourselves from the old belief of the physician who, having treated his patient, thought he had done all that could be expected of him. We now feel that this would be an inadequate conception of our duty, and that not unfrequently the particular patient cannot and must not be separated from his multifarious connections with the rest of the human race. All our legislative measures in regard to disinfection and preventive vaccination find in social prognosis of disease their justification. I need not dilate on this subject in the country of Jenner, the land of efficient prophylaxis. Is it not also in this great London that as a result of the memorable work of Sir Francis Galton and his school a new science came into being—Eugenics, which held its first congress here a year ago? By improving, according to Galton's ideas, the racial qualities, both physical and mental, of the generations to come, and also by surrounding with all possible care the life of the child before and after birth, in conformity with Pinard's teaching, it seems to me that we are transferring into the domain of prophylaxis, for the greater good of the race, the notion of collective and social prognosis.

THERAPEUTICAL ADVANCES.

Does our progressively extended prognosis, based on the use of new methods and on a wider comprehension of the far-reaching effects of disease, concern facts that are always identical with themsleves? Is the prognosis of a given disease immutable? If not, why and how does it vary? To admit the immutability of medical prognosis would be to declare that our therapeutics have not progressed, Now, surely, it is not at the present time that such a dispiriting opinion could be upheld. For the last 40 years, before our very eyes, the whole of scientific and practical medicine, undergoing an incredibly rapid evolution, has been wonderfully transformed. The problems of pathogenesis, our means of clinical investigation, our methods of treatment, have all assumed a new aspect, and the prognosis of all morbid conditions has thus been deeply modified. I think it can be said that there is almost no group of diseases the gravity of which has not been notably attenuated in recent years. No doubt there are still too many cases where the physician feels powerless; but even then his lack of power is no longer so absolute. The cancer problem is always before us, but we cannot deny that, thanks to X-rays and radium, thanks to improvement in surgical *technique,* thanks also to recent advances in chemical treatment, our means of action have become less scanty and more often efficient. We may be unable to modify the prognosis of a given lesion: cerebral hæmorrhage and pulmonary embolism have lost none of their gravity. But the changes in the arterial or venous systems, which give rise to those serious accidents, are better known to us: we can prevent them or treat them with greater success. Thus even in the least favourable cases we have gained some ground.

On the other hand, we might quote many instances, especially in the domain of infections, where the prognosis of to-day is widely different from that of former times. Rheumatic fever nowadays is no longer what it was in Bouillaud's time: salicylic medication has made another disease of it. Since the introduction of Brand's treatment our typhoid patients are no longer the same, and the results already obtained by antityphoid bacteriotherapy enable us to look forward to a near and decisive advance We cannot forget what diphtheria was before the discovery of diphtheritic antitoxin by Behring and Kitasato and the splendid therapeutic deduction brought forward by Roux at the Congress at Budapest. The morbidity and mortality tables have since demonstrated throughout the world what a change has been brought about in the prognosis of diphtheria. Even the most terrible and relentless of diseases, rabies, has met its master, and the antirabic vaccination of Pasteur is perhaps the most amazing therapeutical triumph of our time.

And so each day brings with it some progress, some attenuation or modification of our prognosis criteria, some new methods of fighting disease. Armed as we are with our modern methods, having at our command mercury and arsenic in extremely active forms, do we not treat syphilis with much greater chances of success than formerly? It is not my intention to dwell on this point, but I should like to recall two other quite recent and typical instances.

Consider one of the hitherto incurable forms of trypanosomiasis—sleeping sickness. Thornton, and later Nicole and Mesnil, demonstrated experimentally the value of atoxyl in animal trypanosomiasis. Ayres Kopke, of Lisbon, applied for the first time the treatment to the human being, and since then results have been constantly improving. At the Pasteur Hospital in Paris Dr. Louis Martin has treated and followed in the last few years 40 cases of sleeping sickness, and he has kindly supplied me with his statistics. Of the first 20 cases, 11 died; of the next 10, 4 died; of the last 10 cases, none died (and yet two patients of the last series were treated more than three years after the onset of the malady). Those gratifying results are due to the improvement in the method of treatment: for large doses, separated by intervals of ten days, Louis Martin has gradually substituted smaller doses repeated more often, and success has been more complete and more lasting. We can now talk of cure in a disease the recognition of which, a few years back, was equivalent to a death sentence.

Let us now take another instance afforded by dysentery. We know that in this disease identical symptoms may be produced through different ætiological agencies and we recognise two essential forms of dysentery, one due to bacillary, the other to amœbic infection. Therapeutical advance has not been long in confirming this distinction, and to two specific infections we now oppose two specific treatments. Bacillary dysentery is almost immediately arrested and cured by specific serum-therapy as established by Shiga, Kruse, Todd, Rosenthal, Vaillard and Dopter—to mention only the early workers in the field. As for amœbic dysentery, it now possesses also its specific treatment which, although quite recent, has already proved its high value. This new treatment we owe to a British physician, Leonard Rogers, of Calcutta. For the last twelve years Rogers has devoted himself to the study of ipecacuanha medication in amœbic dysentery and to the demonstration of its preventive action in regard to liver abscess. Later, following Vedder's experiments, for ipecacuanha itself he substituted one of its alkaloids, emetine (or rather emetine hydrochloride), and he achieved the greatest success in curing quickly and entirely the intestinal and hepatic forms of amœbic dysentery. Whereas in dysenteries of equal gravity the death-rate for the cases treated with powdered ipecacuanha was 34.6 per 100, with emetine it is reduced to 8 per 100. With ipecacuanha the average duration of the treatment was 16.4 days, with emetine it has dropped to 7.2 days Here, then, is another disease, and a grave one, the prognosis of which has been entirely modified in a remarkably short time. If from infections we pass to the other groups of disease progress seems less brilliant, and the future possibilities appear to be more limited. The study of the disturbances of nutritional metabolism brings us face to face with causes more obscure, that act more slowly, and that are less favourable to therapeutical intervention. And yet, here again, our modern conquests are innumerable. Of these we may mention organotherapy, dietetic treatment, and physical therapeutics. Everywhere disease is falling back before the ceaseless efforts of therapeutics and hygiene; everywhere prognosis is undergoing an evolution and holding out fresh hopes.

The Limitations of Prognosis.

The foregoing consideration of a few of the general aspects of that great subject, medical prognosis, would appear to lead us to a very hopeful conclusion. Yet to this, as to all branches of human knowledge, there are limitations which we must not lose sight of and that are calculated to humble, if needs be, our medical pride and to bring it down to a suitable degree of modesty. What, then, are the limitations of medical prognosis? An essential distinction must here be made between theoretical and clinical prognosis. Theoretically almost everything is known to us. In a given disease we can enumerate and describe, without serious risks of omission or error, most of the complications or contingencies that may modify its course. But all that is book prognosis, far removed—unfortunately—from the living and individual prognosis, applied not to a disease but to a patient. How many unknown quantities in medical practice, and how many surprises! How little does it avail to know all the complications of typhoid fever if at the bedside of a typhoid case we cannot foresee the intestinal hæmorrhage or the perforation which, perhaps in a few hours, may endanger the patient's life. Again, for the newly infected syphilitic, for the gouty subject, for the epileptic at his first attack, for countless other sick patients of all kinds, how many uncertainties for the future! When a morbid condition begins, we know theoretically the various paths it may follow: but which one will it follow? That is the real prognostic problem, the solution of which too often eludes our grasp. Doubtless the knowledge of the inherited soil and of previous disturbances may sometimes help us; but we are ignorant of the conditions which determine the localisation of septicæmic or toxinæmic infections. No one can predict at the onset of pneumonia the pneumococcal endocarditis or meningitis that will cause death. Once the metastasis is established we cannot always appreciate the degree or the evolution of the anatomical lesion. We cannot tell whether, in a typhoid case, intestinal ulceration is growing deeper, thus threatening to cause perforation. Again, in a patient with mitral stenosis, we cannot foresee whether hæmorrhagic infarction or cerebral embolism is going to occur. And so, even in these diseases with which we are most thoroughly acquainted, prognosis remains uncertain. It is wise in theory but faltering in practice. To all those reasons for uncertainty and prudent reserve I must add one of major importance; I mean the reaction of the nervous system. I forget what statesman once said that in politics one must always reckon with the "imponderables"; surely in medical practice this remark is no less true. The nerve cell may always add its perturbing influence to all morbid processes, whether in the sense of inhibition or of stimulation; and we cannot calculate nor master at will nervous reaction, either in the sphere of motor or sensory manifestations, or of psychical phenomena, or of visceral pain. We try to redress or direct it, but it may be impossible for us to foresee its gravity or duration.

Finally, and dominating the whole question of prognosis, there remains for us to gauge the possibilities of the organism that has fallen a prey to sickness. Shall we find in it the resources necessary for overpowering disease? How much can it stand and how much can we expect of it? That is the great problem which commands and includes all the others. Are we always able to solve it? I fear not. Uncertainty and disappointment must necessarily be often our lot; but since the science of prognosis is one of the loftiest summits of medicine, we must in our ceaseless advance ever strive to behold its crowning height. Even if it remains distant and lost in the clouds, we must never despair of lessening the intervening distance. Such an ambition is a duty, and it will ever be the best stimulant to medical endeavour.

OPERATING THEATRES.

ST. MARK'S HOSPITAL.

Operation for Procidentia Recti.—Mr. Aslett Baldwin operated on a man, æt. 32, who had been admitted for prolapse of the rectum, involving all the coats of the bowel. The condition had been present for a number of years, and had been so bad as to entirely unfit the man from following any occupation. He had undergone two operations previously for the cure of the condition at a London hospital, but after a short period of relief after each operation relapse had taken place, and the patient was now as bad as ever. On examination, six or eight inches of the bowel were prolapsed through the anus, which, owing to the constant dilatation, had very little contractile power.

The patient was anæsthetised and put into the Trendelenberg position, and an incision made over the lower end of the left rectus muscle; the anterior sheath was incised and the muscle displaced outwards and the peritoneal cavity opened. A hand was introduced into the pelvis and the rectum pulled upward, thus reducing the prolapse. An incision was now made through the peritoneum and fascia of the left iliac fossa down to the iliacus muscle, and parallel to the external iliac vessels. The peritoneum and fascia were now turned sideways from the incision, thus forming two long flaps and leaving the iliacus muscle bare; the pelvic colon just above the rectum was drawn up as taut as convenient and laid in place over the bare iliacus muscle and the loosened flaps of the peritoneum and fascia sutured to it on each side, thus anchoring the bowel to the left iliac fossa for three or four inches. The peritoneum and the posterior rectus sheath were closed with a continuous thread suture. The rectus muscle was allowed to fall back into position; the anterior rectus sheath was closed with No. 2 chromic catgut, reinforced in several places with silkworm gut sutures.

The patient was sent to bed and instructions given for the foot of the bed to be raised for ten days and the bowels to be kept constipated for the same period, after which liquid paraffin was to be given by the mouth and oil enemas by the rectum to soften the fæces and prevent straining. While the man was in bed he was instructed to practice anal contractions frequently to increase the power of the anal muscle. He was kept in bed for three weeks, and when he left the hospital a few days after the sphincter power had markedly increased. He had since been up from time to time to show himself; the sphincter muscle is now practically normal, and nine months after the operation there is no sign of prolapse present, and the patient has no pain or trouble whatever with his bowels.

Mr. Baldwin said that in a bad case of this kind, which had been operated on twice previously by posterior methods, he thought the most certain and safe operation for obtaining a radical cure was the one he had just performed. He considered it was much better than suture of the bowel to the anterior abdominal wall, because this was not infrequently followed by continuous dragging pain, this being the most sensitive part of the peritoneum; and he had even known a patient insist on having the bowel freed, saying he preferred the prolapse to the constant pain. After the posterior method no pain or discomfort follow the operation.

SPECIAL REPORTS.

THE EIGHTY-FIRST ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT BRIGHTON, 1913.

[From Our Special Representative.]

CONCLUDING ARTICLE.

The Excursions.

After the week's strenuous work a pleasant diversion was made by the various excursions which were arranged for the Saturday. We are precluded by considerations of space from describing these interesting events in detail, but mention must be made of the enjoyable visit to Eastbourne, of the mayoral garden party at Worthing, of the notable visits to Chichester, Tunbridge Wells, and Arundel. During the week many social entertainments on a large scale were held, foremost among which may be mentioned that given by the Mayor and Mayoress of Brighton on the Wednesday evening at the Royal Pavilion, and the garden party given by the Mayor and Mayoress of Hove at St. Ann's Well Gardens on the Thursday afternoon. Both these functions were brilliant in the extreme and were largely attended. Bungalow Town, Lancing College, and Lewes were also the centres of enjoyable outings. On Friday night the President held a reception at the Hove Town Hall.

The Pathological Museum.

Though not so extensive as in some previous years, and handicapped in the absence of a catalogue, yet the Pathological Museum, housed in the Municipal Training College, contained many exhibits of real interest. Among these may be mentioned the fine collection of radiograms by Drs. W. A. Griggs, Hall-Edwards, Bythell and Barclay, W. B. Prowse, F. Bailey, and Delpratt Harris. There were some fine microphotograms by Dr. W. Wasielewski (Heidelberg) of cultures of different types of amœbæ. Dr. H. G. Adamson showed photos and cultures of sporotrichosis and tineæ. Dr. D. Walsh exhibited a series of fine coloured drawings to illustrate the connection between heart disease and certain chronic skin affections. Other dermatological studies were shown by Drs. A. Eddowes and Haldin Davis. Dr. Hans Schlimpert (Freiburg) showed a dissection and photo-diagrams of the muscles of the pelvic floor to illustrate the *technique* of the suture of the isolated and non-isolated levatores ani. A fine series of microphotographs to illustrate the surgical pathology of the prostate gland was shown by Mr. Henry Wade (Edinburgh). Dr. H. M. Galt showed various hæmatological apparatus, while some valuable specimens were lent by the Royal College of Surgeons of England, Westminster Hospital, the Royal Sussex County Hospital, and the University of Leeds.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE, LONDON, 1913.

Amid scenes of great brilliance, H.R.H. Prince Arthur of Connaught opened the Seventeenth International Congress of Medicine in the Albert Hall, London, on Wednesday, August 6th. A welcome was given to the Congress by Sir Edward Grey, and Sir Thomas Barlow then proceeded to deliver his Presidential Address, which will be found in full on p. 171. Dr. W. P. Herringham, the General Secretary, then read his report and introduced the chief representative delegates from other lands, the organist heralding the advance of each by playing a few strains of the National Anthem of his particular nation. Speaking briefly, in turn, they expressed the thanks of their Governments for the invitation to attend the Congress, and their good wishes for its success in advancing medical and surgical science.

The following is the list of the delegates:—United States of America, Dr. William Thayer; Austria, Professor Ritter von Baberler; Argentina, Dr. Eliseo Segura; Belgium, Professor Heger; Brazil, Professor Marcos Cavalcanti; China, Dr. Wu; Cuba, Dr. Aristides Agramonte; Denmark, Dr. Madsen; France, M. Landouzy; Germany, His Excellency Professor v. Schjerning; Guatemala, Dr. Azurdia; Holland, Dr. Rijnberk; Hungary, Professor Dr. Emil de Grosz; Italy, Professor Bianchi; Japan, Dr. Takamina; Mexico, Dr. Jose Larumbé; Monaco, Dr. Caillaud; Nicaragua, Dr. Alejandro Cesar; Norway, Professor Dr. Uchermann; Portugal, Dr. Luiz de Freitas Viegas; Russia, General Dr. Rapschewsky; Servia, Dr. Subbotitch; Spain, Dr. Recasius; Switzerland, Professor Sahli; Sweden, Professor Essen Möller. The President of the Permanent Commission of the Congress, Professor Waldeyer, and the President of the International Medical Press Association, Dr. Lucas-Championnière, also spoke.

The address in Medicine was delivered by Professor Chauffard later on in the day, a full abstract of which will be found on p. 173. On Wednesday evening a reception was held by the President and Lady Barlow and officials of the Congress, at the Natural History Museum, which was attended by a vast host of members and their ladies.

The address in Surgery was delivered on Thursday, August 7th, by Professor Harvey Cushing, of Harvard University, which we hope to publish in our next issue.

One of the most distinguished medical visitors was W.G.R. Professor Paul Ehrlich, of Frankfort a/M., of "606" fame. His address in Pathology, in which he dealt mainly with the modern doctrine of chemotherapy, was listened to with rapt attention. He also spoke at a combined meeting of Sections XIII. and XX. on the Monday morning in the Governors' Hall of St. Thomas's Hospital, where Professor Wassermann also made an appearance and spoke. At 2 p.m. on the same day the address on Heredity was delivered by Professor W. Bateson, F.R.S. The address on Public Health was given by the Right Hon. John Burns, M.P., President of the Local Government Board; and this was followed by the closing meeting of the Congress in the Albert Hall.

Ample accommodation was provided for the 23 Sections and the three Sub-sections in the Imperial College of Science, the Royal School of Science, the Royal Society of Medicine, St. Thomas's Hospital Medical School, the Royal College of Physicians, the Imperial Institute, the Royal Dental Hospital, and the Central Technical College, in all of which many important topics were discussed and a large number of valuable papers read.

The Medical Museum of the Congress was situated in the Imperial College of Science, and was exceedingly well arranged. The Dermatological Section (XIII.) had a separate museum of its own at St. Thomas's Hospital. A special section was organised by the International Association of Medical Museums to illustrate improvements in the various methods of preserving and exhibiting specimens, and this proved to be of very great interest.

The Medical Exhibition was situated in the large Hall of the University of London, and was probably the most extensive and important ever seen in connection with a medical congress. We hope to publish a notice of the chief exhibits in an early issue.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Aug. 9th, 1913.

Dysentery and Emetine.

Since Dr. Rogers (Calcutta) published his remarkable cures of dysentery by hypodermic injections of hydrochlorate of emetine, this treatment has been tried in France. All that Dr. Rogers claimed was fully confirmed.

There are two kinds of dysentery, as everyone knows—bacillary and amœbic. The former is treated successfully with serotherapy; but for the latter the treatment was more or less empirical; it is against this form of dysentery that emetine acts as a specific.

Amœbic dysentery, with its frequent complication, abscess of the liver, was hitherto treated by simarouba, ko-sam, and above all, ipecacuanha, to which was adjoined a surgical operation when necessary.

The frequent good results obtained from ipecacuanha encouraged Rogers, some five years ago, to apply the treatment to abcess of the liver due to amœbic dysentery; he obtained a great decrease of these abscesses in the Indian army. But the treatment was not always well supported on account of the nausea and the severe vomiting it provoked. His attention having been called to the researches of Vedder which showed that emetine, principal alkaloid of ipecacuanha, could destroy the amœba in their cultures, Rogers adopted it as a substitute for the Brazilian method and injected it hypodermically; he obtained thus a stronger action with infinitely less doses, while the mode of administration was as agreeable as it was simple. The results exceeded his expectations. Of thirty patients treated by the old method, thirteen were cured, six temporarily relieved, while eleven died. Of twenty-two patients treated by injections of emetine, twenty were rapidly and definitely cured, the remaining two succumbed.

The first in France to try Rogers' method was Prof. Chauffard, who, at the close of last year, treated a patient suffering from amœbic abscess of the liver that had opened into the lung and was expelled by expectoration in certain quantities every day for five months. Dr. Chauffard injected hypodermically one grain of hydrochlorate of emetine each day for five days; the result was not slow to appear. In a few days the expectoration of pus ceased completely, the temperature fell to normal, and the patient, who was much emaciated, gained weight; the cure was permanent. Struck by the rapidity of its action, M. Chauffard declared at the Académie de Médécine that emetine was a specific for amœbic dysentery. Immediately afterwards, M. Flandin published a similar case. The patient suffered from dysentery for three years. In 1911 the malady was complicated by an abscess of the liver that opened in the lung; for a long time the patient was thought to be tuberculous. In the summer of 1912, the abscess was incised and drained. The immediate results were excellent, and for four months the patient was considered cured. A month later, however, he recommenced to expectorate pus, and his temperature went up. A second incision was made and the abscess drained, but the condition did not improve. It was at this point that a grain and a half of emetine was injected for the first two days and one grain for two subsequent days. Immediately the temperature fell to the normal, the cough diminished and the pus was much less abundant. A month later, however, there was a slight relapse, but it yielded to a second series of injections.

Dr. Dopter, of Val-de-Grace, reported another cure of simple dysentery. It was the case of a soldier suffering from a very grave attack of dysentery, which ko-sam improved considerably at first, but soon afterwards a relapse occurred, and this time emetine was prescribed. After five injections the patient was definitely cured. Dr. Rouget published the case of a colonial officer who suffered from dysentery for ten years. After four injections of emetine the flux was cured.

It would be superfluous to continue the enumeration of other cases noted from different quarters; enough has been said to show the favour the method of Rogers has received in France in the treatment of dysentery. However, it may be well to state that hæmoptysis is equally amenable to emetine where all other treatment fails.

ERYSIPELAS

Phenic acid (liquid), 15 drops.
Essence of turpentine, 1 oz.

Apply with a brush every hour.

BUBO.

Chloride of zinc, 1 dr.
Oxide of zinc, 2 oz.
Water, 2 oz.

After evacuating the pus, the paste is applied; where there is much tunnelling, a piece of gauze coated with the paste is introduced into the cavity. Two or three dressings at four days' interval are sufficient.

GERMANY.

Berlin, Aug. 9th, 1913.

AT the Medizinische Gesellschaft, Hr. Gräfner showed a case of

OSTEITIS DEFORMANS (Paget).

He said such a case had not been brought before the Society for more than six years, when Hr. Toby showed a case. The patient shown had known no other illness than the one for which he was brought forward, with the exception of rickets and measles. There was no trace of alcholism or syphilis. The disease began about 15 years ago, when he noticed a gradual increase in the circumference of his head with diminution of the height of the body. The patient had not been addicted to having his photograph taken, so there were few records of his former appearance in existence. There were only two that showed the sharp changes that had taken place. The head at last grew to such a size that he could no longer get fitted in shops but had to have his hats made for him. At last his wife made him fur caps, which he wore summer and winter. He first came under the speaker's observation in October of last year, when the loss of height led him to suspect some affection analogous to osteomalacia. He therefore prescribed cod liver oil with phosphorus; in three months the head was 3 cm. less in circumference, and the wife had to draw in the hat. The complaints of the patient lay in obscure rheumatic pains, cough, shortness of breath, deafness for the last ten years, for the last two years disturbances of vision, and more lately occasional dyspeptic attacks with general weakness. There was bony growth in different places; the front part of the head, the temples, and the back of the head. The condition of the blood-vessels was remarkable; they could be seen, and they stood out with startling fulness when he inclined his head forwards. The head could be rotated horizontally freely, but not backwards and forwards. The inclination of the head forward was also remarkable, the kyphosis, and the outward bending of the bones of the legs. Neither the nervous system nor the thyroid showed any peculiarities. The Wassermann test was negative. As regarded the eyes, there was some atrophy of the choroid on the left, in the right, large semicircular patches of atrophy of the choroid to the right of the papilla. Angiosclerosis of the fundus on both sides. (Röntgen demonstrations shown.)

In the discussion that took place, Hr. von Hansemann said he would remark on the interesting case shown that it was difficult to distinguish Paget's disease from other enlargements. At a time some years ago, when he took an active interest in the subject, he took the trouble to go round and examine all the celebrated skulls of that description in the different collections in which they were to be seen. He very soon came to the conviction that there was no uniformity about them, and that they were caused by different diseases. He had also seen the original made use of by Paget himself when working at the subject. All these forms had a thoroughly smooth skull, as was to be seen in the most classical example in Darmstadt in the Zoological Museum; for which reason it was know to so few medical men. It was a perfectly smooth skull, and did not show what the one before them did. From the Röntgen plates he must believe that the head was a near approach to what had been described as leontiasis ossea, and which was to be seen in the Leyden Museum in Holland. It was one of the few skulls that had been observed during life. Very few such bones had been examined anatomically; most of them were of an earlier date, and their antecedence was but dark. Some of these had a knobby surface, and almost all of them had different significances. Nearly all of them were cases of multiple bony growths, which had nothing at all to do with Paget's osteitis deformans. He was of opinion that when the case came to be examined anatomically it would be found to have nothing to do with Paget's disease, but that it was one of development of tumours. He could not, of course, say positively that that would be so, but he suspected that they were growths that sprang from the periosteum. Futher knowledge must, of course, be left to the future. Nevertheless, he would still keep to the name, otherwise it would be as if something had been picked out, examined, and named, and then thrown back again into the tub. We should never get any insight into diseases in that way. On the contrary, we must differentiate still further. It was unfortunate that the disease was so rare that the individual surgeon did not often get the opportunity of seeing it. The case now shown was certainly different from that shown by Hrn. Toby Cohn, and in his opinion quite different from that originally described as Paget's disease. It was an advance to learn that there were different affections of that kind, and that they must not all be grouped together.

AUSTRIA.

Vienna, Aug. 9th, 1913.

AT the recent meeting of the Gesellschaft für Innere Medizin und Kinderheilkunde in Vienna, Dr. M. Zarfl read a paper on the subject of

PEMPHIGUS BENIGNUS CONGENITUS.

The text of the communication was furnished by the case of an infant who was ushered into the world with a bullous cutaneous eruption. There were many of the bullæ of the size of beans, or somewhat larger. The infant was first seen by the reader of the paper on the tenth day of extra-uterine existence, when there were obvious indications of the gradual absorption of the contents of some of the blebs, and distinct traces of the former presence of some which had disappeared. The majority of those traces were roundish in outline, of size about that of a small pea, faintly reddish in colour, covered with a thin and delicately wrinkled cuticle, and displaying around their margins the remains of the exuded material which had disappeared. On the hands and feet there were also some easily detached shreds of cuticle remaining as evidences of the former presence of bullæ which had disappeared; and as they dried up a new crop appeared in the neighbourhood of the traces of their predecessors. Hanging on to the fingers and toes were also to be seen large shreds of cuticle. Some obviously recent bullæ were to be seen beside those which were gradually shrinking ones; and when the little patient was seen on the following day another fresh crop had made its appearance. It could then be noticed that the recent specimens, which at first presented a fairly limpid fluid, soon were filled with turbid contents. They were each surrounded by a narrow reddish zone, and were chiefly located on the hairy scalp and on the skin of the fingers. They soon dried up and formed small, thin scabs. It is remarkable that some of the bullæ formed on the margins of the nails, and affected the bed of the same to such a degree that loss of the nail ensued in the case of several of the fingers and each of the great toes. The general condition of the infant had been good throughout, and still continues to be so. No trace of fever had developed at any time; the only constitutional change of any kind that had appeared was in the form of some slight derangements of the digestive apparatus. The eruption never gave the idea of having owed it origin to luetic infection. Not one of the numerous bullæ manifested itself as an infiltration; they all dried up and healed without any specific treatment. The Wassermann test gave negative results in both mother and infant. The case displayed throughout the characteristics of a benign congenital bullous eruption. Such cases are exceedingly rare of occurrence; up to the present date but fourteen such have been placed on record. They have all been traced backwards to intra-uterine infection. This may possibly take place through the vagina, when the birth has been postponed for a long interval after the escape of the amniotic fluid. As a result of the observations recorded after experimental inoculation of pemphigus, the conclusion has been arrived at that the period of incubation may be calculated, with fairly reliable accuracy, as averaging 36 hours. Such time of incubation, as experimentally observed, by no means tallies with that noticed in the present case—nor in those recorded by others. On the other hand, however, it is possible that the infection may have taken place through the placental vessels. Of course, the question of the mode of development of the cocci in the blood of the mother may be raised. But, however this question may ultimately be determined, neither in the present case, nor in any of those which have been placed on record by others, was there any appreciable constitutional disturbance displayed by the mother.

Dr. K. Hochsinger expressed the opinion that the rupture of the amnion and escape of the waters some days before the delivery of the fœtus would satisfactorily account for the appearance of the congenital pemphigus in this and other similar cases. The transition of the staphylococci along the placental channels—hæmic or lymphatic, or both—could not have occurred in such cases; if such course had been followed the result would have been the development of genuine pyæmic infection.

HUNGARY.

Budapest, Aug 9th, 1913.

At a recent meeting of the Budapest Interhospital Association, Dr. Sigmund Szerb read a paper on

The Relation of Meat Diet to Gout.

He said that Pflüger showed in 1900 that an exclusive diet of horse-flesh produced in dogs severe diarrhœa. He succeeded in isolating, to a certain extent, the constituent producing this deleterious effect; he found it present in the broth of the meat, could not precipitate it by means of alcohol, but could obtain an ethereal extract. At this time, Kionka showed that he could produce a genuine arthritis urica in hens by an exclusive diet of meat lasting five months. Others before this had produced gout in birds in various ways: Ebstein, by the injection of chromic acid; von Kossa, by the administration of oxalic acid, phenol, etc. The microscopic changes in the organs of hens made gouty by methods such as those of Kionka, were studied by Bannes, with the following findings: retention of urates in the liver, kidneys, spleen, and serous membranes; degenerative processes in the liver, kidneys, and spleen; necroses and cloudy swellings of the epithelia and the larger parenchymatous organs; and finally, that there is microscopically a difference between gout induced by an exclusive meat diet. The above results inspired the reader to investigate the problem as to whether any pathological changes could be found in mammals after an exclusive diet on meat. The animals experimented on were dogs. Three of these animals, after being fed for forty days on meat alone, were killed by opening the carotids and immediately subjected to autopsy. They all showed fatty degeneration of the kidneys and liver, differing qualitatively in each case. The clinical history of these animals was as follows: As regards weight, all three presented marked changes, sometimes increasing, sometimes diminishing, but the end-weight not being very different from the initial weight. The general condition was always good. The urine sooner or later contained albumin. Although no cases were found the state of the urine indicated a nephritis. The animals were markedly constipated. The autopsy revealed in all the cases an acute or a subacute nephritis, a cloudy swelling of the liver, parenchyma, and a pigment deposit in the spleen. The reader maintains that although he was not able to produce gout in dogs, as Kionka had in hens, yet his results show some analogy to the clinical and pathological manifestations of human gout, and yet he has proved a direct relationship between an absolute or almost absolute meat diet and the ætiology of gout. He alludes, in this connection, to the frequency of gout among the beef-eating Englishmen, to the increased elimination of uric acid following a superabundant meat diet, and to the fact that only a part of the uric acid is eliminated through the kidneys. The greater part is destroyed, and according to M. Kochmann, in different animals is destroyed in different parts of the body. In the dog, and perhaps also in man, a part of the uric acid is broken up in the liver, in the cow a portion is destroyed in the kidneys, and in all mammals the muscles take an important part in the destruction of uric acid. Moreover, lack of exercise would impair muscular activity in this direction. The diseased kidneys would at the same time be unable to do their share in the excretion of uric acid, with the result that this substance, accumulating in the body in certain localities, would give rise to the pathological and clinical picture of gout. A further support to this hypothesis is seen in the fact that the uric acid arthritis develops gradually, that degeneration of the liver and kidneys is found in many cases of gout, and that all those influences that would cause degeneration of the kidneys, liver and muscles would favour the appearance of gout. Of these influences may be mentioned a meat diet, either exclusive, or nearly so, chronic alcoholic poisoning, and chronic metal intoxication, particularly that of lead.

CANADA.

Toronto, July 21st, 1913.

Annual Meeting of the Canadian Medical Association.

(Concluded from page 127.)

Dr. Llewellyn F. Barker, Professor of Medicine at Johns Hopkins University, Baltimore, gave the address in medicine, which was, in fact, a lecture delivered impromptu, illustrated on the screen, regarding the nerve supply of the internal organs of secretion and of the smooth muscles. The lecture, both because it was on a subject concerning which little is known and on account of the special knowledge thereof possessed by Dr. Barker, was intensely instructive and interesting. As, however, the hall in which it was given was in darkness, it was impossible to take notes. Medical readers who may be desirous of studying Dr. Barker's views will have the opportunity of doing so at a later date, as he has promised to give for publication in the Journal of the Canadian Medical Association a written address dealing with the whole matter.

Dr. J. Alexander Hutchison, surgeon to the General Hospital in Montreal, delivered the address in surgery. He took for his text the

Present-Day Treatment of Fractures,

and passed in review the various modes of dealing with fractures practised by the surgeons of the world, and especially by the surgeons of the English speaking race. He drew largely also from his own experience in this respect, which has been a lengthy one, and owing to the wealth of material obtained at the hospital with which he is connected, has likewise been a full one. Dr. Hutchison gave great praise to the recent report of the Commission appointed by the British Medical Association to investigate the treatment of fractures, and remarked that this report had greatly increased and widened our knowledge on the subject. He went on to say that a report emanating from surgeons of the United States, while it differed from some of the conclusions reached by those responsible for the British report would still further illuminate the matter. The speaker expressed himself as in unison with the views of the framers of the American report wherein they differed from their British confrères. Dr. Hutchison was particularly emphatic in urging upon the Canadian Medical Association the duty of having defined by law the status of medical men with regard to suits for malpractice, instancing the fact that since radiography has been introduced skiagraphs of fractures have been made use of frequently, usually to the detriment of the medical profession. He pointed out the obvious truth, that no layman nor lawyer was competent to say whether a skiagraph was a true picture of existing conditions. Such persons were ignorant of the pathological aspects of the case, questions which experts alone were competent to decide.

REPORT ON THE FRIEDMANN SERUM.

In order to allay the public excitement and to afford the medical profession and the people of Canada an authoritative statement regarding the value of Dr. Friedmann's treatment, the Canadian Association for the Prevention of Tuberculosis nominated a committee of five members to study and report upon cases inoculated by Dr. Friedmann at Montreal, Ottawa, Toronto, and London. That committee afterwards added to itself those physicians who had under their observation the cases treated in those cities. The committee thus constituted begs to report that it has carefully studied the cases and histories of the patients inoculated by Dr. Friedmann, which number in all, for Montreal, 10; for Ottawa, 10; for Toronto, 81; and for London, 15. As a result of their observations from March 11th to present date (July 21st), the following conclusions seem justifiable:—(1) The inoculations have neither constantly nor frequently been followed by marked change in the clinical course of the disease. (2) The cure, or progress towards cure, claimed by Dr. Friedmann for the treatment have neither constantly nor even frequently taken place in the time during which these cases have been under observation. (3) That, upon investigation, the committee finds that the results have been disappointing, and that the claims made for his remedy by Dr. Friedmann have not been proved, and that nothing has been found to justify any confidence in the remedy. (Signed) Professor J. George Adami, Professor J. J. Mackenzie, Dr. A. H. Caulfield, Dr. G. S. Harding, Dr. John W. S. McCullough, Dr. William G. Ross, Dr. J. H. Elliott, and Dr. George D. Porter.

In this form the report of the committee appointed by the Canadian Association for the prevention of Tuberculosis to investigate into the claims made by Dr. Friedmann for his so-called cure for tuberculosis was presented to the Canadian Medical Association at its meeting recently held in London. It should be mentioned that a member of the committee, Dr. Chas. H. H. Hodgetts, of Ottawa, refused to sign the report. His decision for this course, however, was not based on reasons favourable to Dr. Friedmann's remedy, but on the contrary, his refusal to sign was because Dr. Friedmann, not having kept his promise to reveal to the committee the exact composition of his remedy, Dr. Hodgetts was of opinion that both the investigation and report were worthless.

Before the reading of the report, Dr. J. George Adami, Professor of Pathology at the McGill University, Montreal, outlined the history of the events leading up to the report. He said in part that, although guilty of much that was unethical so far as the profession was concerned, the Canadian Association for the Prevention of Tuberculosis had determined to give him a thorough test under the most favourable circumstances, in view of public opinion. He was invited to come to Canada, visited four cities, and was allowed to treat patients of his own selection. The conditions had been most favourable to Dr. Friedmann, no interference or unjust treatment being accorded him. The medical men of Canada approached him and his remedy with an open mind.

SECTION OF PUBLIC HEALTH.

This section was presided over by Dr. Helen MacMurchy, of Toronto, and its proceedings were interesting in a high degree. Medical inspection of schools was the first subject discussed. Dr. John Stewart, of Halifax, U.S., presented a paper in which, after reviewing the work being done in all the provinces, he stated that he was forced to the conclusion that the work was yet in its elementary stage. While there had been progress in the cities, owing to the efforts of the few, there was still apathy shown in the smaller places, and would be until some definite system had been worked out which would constitute a national standard. For this reason, therefore, there was need for a national public health service that could deal with such questions as immigration, sanitation of factories, control of disease, along with medical inspection of schools. The general trend of the discussion was that federal control would be the true solution of the problem of efficient public health bureaus. In the case of municipal control, local politics were certain to influence and hinder.

VENEREAL DISEASES.

Two important papers were read dealing with the problem of how to best control the spread of venereal disease. One was by Dr. A. W. Hill, Medical Officer of Health of London (Ontario), and the other by Dr. F. A. Clarkson, of Toronto. On the subjects of medical inspection of schools and of venereal disease two committees were appointed, who handed in their reports at a later session. The chief recommendation of the report on medical inspection of schools was to the effect that, for the present, the inspection of school children should be performed by an appointee of the School Board, working in conjunction with the Medical Officer of Health. However, it was eventually decided to leave the matter over for another year, and have it take a prominent place on the programme of the next convention. The main recommendation of the report on venereal diseases was that provincial Boards of Health be asked to have venereal diseases added to the list of notifiable diseases.

Dr. Llewellyn Barker, of Johns Hopkins University, Baltimore, gave by special request an address on

MENTAL HYGIENE,

a subject in which he is deeply interested—in fact, he was mainly instrumental in initiating the campaign for mental hygiene which is being so earnestly prosecuted in the United States at the present time. Dr. Barker said in part, that by the term "mental hygiene" was meant the conservation and improvement of mental health, to make men think better, act better, and become better than now. The imbecile, the criminal, the prostitute, the insane, were so because they had to be. Their minds worked that way. The majority had been born with a bad brain, and acted as their brain directed; while others, though born with a good brain, because of some deleterious act, did wrong or criminal things. Two sciences were dealing with the problem of mind improvement. One was the science of eugenics, and the other of euthenics. The advocates of the first believed largely in heredity, and were endeavouring to bring children into the world equipped with good brains. The other school believed that environment played the larger part in the development and expression of brain power. Both schools were of equal importance, and there should be no quarrel between them. Dr. Barker outlined the recent campaign in the United States inaugurated to make the public, the doctors, and the law-givers recognise the importance of the question of mental hygiene. Criminality, prostitution, imbecility and the like, were due to bad brains, and by enacting proper laws to prevent the marriage of the unfit, to prevent the spread of diseases that affect the physical well-being of the coming generation, much of the evil could be stamped out.

Dr. Alexander McPhedran, of Toronto, introduced a symposium on diseases of the stomach, and Dr. A. J. Ochsner, of Chicago, one on the thyroid.

Dr. Frank Billings, of Chicago, gave a medical clinical lecture, and Dr. John McMurphy, of Chicago, gave a surgical clinic. The city chosen for the next place of meeting was St. John, New Brunswick, and Dr. Murray Maclaren, of that city, was elected as the next president.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE CONTROL OF QUACKERY.

To the Editor of The Medical Press and Circular.

Sir,—Although under different headings, the letters of Mr. Bradburne and Dr. Dutton in your current number deal virtually with the same subject. The whole of the evils of the kinds alluded to might easily be put an end to by simple legislation. I do not refer to those extremely subtle forms of quackery which make up so small a part of the whole; I refer only to offences as coarse as the coarsest that are easily amenable to the Food and Drugs Act, the Merchandise Marks Act, and to the common law which deals with the offence of getting money under false pretences. Amendment of these laws and the appointment of a Public Prosecutor charged with their administration would serve at once to extinguish the greater part of the quack medicine trade. And, as it has been found possible easily to prevent an unqualified man from practising as a solicitor under any pretext whatever, so it cannot be difficult to make efficient the penal clauses of medical Acts, to enable the public to distinguish between legally qualified and unqualified men, or at least prevent fraudulent pretenders from assuming titles and palming themselves off upon the public as fully qualified practitioners. There exists already a great deal too much preventable human misery, and it is intolerable that increase of this should be possible to so enormous an extent, merely through lack of the simple laws which would put an end to the practices of the most cynical and cruel section of that great army of malefactors which remains parasitic upon latter-day society.

The case for medical law reform is overwhelming, and so far as the traffic in quack remedies is concerned, it has been established by the evidence before the Select Committee. It may be well to wait for publication of the report of the Committee before resuming the agitation which led to its appointment. It is the duty of the profession to force the whole question to the front and leave upon the Legislature the responsibility for the evils and abuses the extent of which is only fully known to medical men.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common.
August 9th, 1913.

P.S.—A glaring illustration of the shameful attitude of the bulk of the newspaper Press towards quackery is furnished in the issue of one of the foremost papers of the day, which I enclose. This paper is full of reports of the Medical Congress, and contains a leader on it by its well-known medical contributor. In the previous issue appeared a report of Sir T. Barlow's speech denouncing alcoholic quack remedies. It is impossible to believe that the proprietors can be ignorant of the nature of the traffic they are abetting. On one of the principal pages alone among important matter you will see an enormous advertisement of a quack remedy, the sole potent ingredient of which is alcohol. The alcohol is in large doses. It is put forth as a cure for "all the diseases of debility, for anæmia and depression." Debility, anæmia and depression are not diseases; they are merely symptoms of many widely different maladies, and except upon an accurate diagnosis and in the hands of a skilled physician, alcohol must prove a poison in most of such conditions, and, if long continued, a deadly poison in many of them. The proprietors of this paper, like all their class, assume the *rôle* of guardians of the welfare of the people, defenders of the national honour. The simple public take the appearance of advertisements in papers of this class as a guarantee of good faith; and, unless the advertisements were followed by an enormous sale, it would be impossible for the nostrum-monger to support the vast expenditure I endeavoured to expose this scandal in my evidence before the Select Committee. The report of the Committee, it is stated to-day, is put off now till next session. The prospect of legislation seems remote.

A DOCTOR'S WIFE ON DRESS.

To the Editor of The Medical Press and Circular.

Sir,—The question of women's health is closely wrapped up in their dress. Many simple women, naturally robust, are unconsciously handicapped by their anti-hygienic habiliments. Many foolish, delicate women are unwittingly kept on the verge of chronic invalidism by the same cause. The subject cannot be so freely discussed anywhere as in a medical paper. I therefore was glad to see the letter of a "Doctor's Wife" in your last number. I believe that every intellectual, educated doctor's wife (and are they not nearly all intellectual and educated?) reads the medical papers. I rarely miss. I can say the same of the majority of my acquaintances. Nearly all doctors are married. There must be more than twenty thousand of us in the Kingdom. If we could be brought together we might form a lump big enough to leaven the mass of of our fellow-countrywomen. Some concerted propaganda or action might be started, although dress reform leagues have hitherto made such a poor show. I agree with everything that a "Doctor's Wife" says. She seems equally observant and wise. Many of us will envy the literary skill with which she expresses herself. I agree that the first thing needed is emancipation from the thrall of the Parisian man-milliner. He is at the same time inartistic, immodest, and unhygienic. Not to go further back than the middle of the Nineteenth Century, the fashions imported from France have all been of this character. We have had the crinoline, the bustle, the pannier, and no end of different forms of corsets to distort the natural form, the chignon and head-dresses, bonnets, and hats often more useless, hideous and barbarous than the ornaments of a Zulu bride. And now we have the semi-nude. The semi-nude and the nude are fitted for the tropics alone, and can be displayed with modesty only by natives who are to the manner born. From toe to top—from the thin shoe with the preposterous high heel and the diaphanous stocking, to the grotesque hat that crowns the costume, it is all wrong from the point of view of art, utility or health.

I am, Sir, yours truly,
A Consultant's Wife.

London, W.
August 8th, 1913.

To the Editor of The Medical Press and Circular.

Sir,—The nude is not necessarily either indelicate, indecent, or lewdly suggestive. Witness the Greek masterpieces. But try the experiment of putting an open bodice on the Venus of Milo, or a transparent gown on the Medici, and note the effect. The Greek expresses absolute purity. On the other hand, with the exception, perhaps, of that of Rodin and one or two others, the nude work of modern French sculptors seems inspired by models selected from the demi-monde or prostitute class. See, for example, the dancing figure on the Grand Opera building, and the figures at the base of the Gambetta monument. French art is decadent, and expresses this decay in dress throughout. The climate neither of France nor of these islands calls for nakedness, and the exposure which is now the fashion is fitted only for those women whose stock-in-trade is formed by their bodies. I thank a "Doctor's Wife" for her letter of protest. I am in the same position, albeit a student and follower of art as well, and I can support her argument from that point of view, whilst appreciating the question fully in its hygienic aspect.

I am, Sir, yours truly,
Doctor's Wife No. 2.

August 9th, 1913.

OBITUARY.

DR. G. MIDDLEMISS, OF DARLINGTON.

We regret to record the death of Dr. George Middlemiss, M.D., V.D., which has taken place at his residence, Wear Court, Grange Road, Darlington. By this sad event Darlington loses a citizen who filled an honourable position in the town for about four decades, for three of which he held office under the Board of Guardians, and who for 15 or 16 years held a commission in the local Volunteer force, taking a very keen interest in ambulance work, both in connection with that force and in civil life.

Dr. Middlemiss, who was 68 years of age, was a native of Sunderland, and came to Darlington at the beginning of the '70's, having qualified at Glasgow in 1871. He became M.D.Durham in 1889. He joined the Volunteer force in 1861, and was a member of the 3rd Vol. Batt. D.L.I., and as such was present at the great Volunteer review in 1862 at Edinburgh, when her late Majesty Queen Victoria reviewed the troops. He was commissioned as acting surgeon in September, 1882, Captain in 1889, Major in 1897, Surgeon-Lieutenant-Colonel in September, 1902, when the Volunteer Decoration was conferred upon him, and retired with the rank of Surgeon-Colonel in 1907. He was also granted the commission of Surgeon-Captain in 1893, promoted Surgeon-Major in 1894, and Surgeon-Lieutenant-Colonel in 1902 in the Army Medical Reserve of Officers, so that he had two commissions in H.M. Forces of the same rank. He instructed the first lot of regimental bearers who in 1884 obtained the Army Ambulance certificate, these men belonging to the Darlington detachment, this battalion being the first in the country to obtain the certificate and permission to wear the Geneva Badge on the arm.

Dr. Middlemiss was for 30 years Medical Officer to Darlington Workhouse and poor law doctor for Darlington, and during that time paid most careful and conscientious attention to all his poor patients, by whom he was held in affectionate esteem for his great kindness. It was to them a matter of great regret when he resigned the position a year or so ago. He was a very keen Freemason, taking great interest in the duties of all the various offices he filled, and attaining high rank in the province, being a past-master of the Universities Lodge, Durham, and of the Marquess of Ripon Lodge, Darlington, and was a P.P.J.G.W. of the Province of Durham, having been appointed to that elevated office in the craft in 1901. He was also a member of the Hospital of St. John of Jerusalem in England, and gave a great deal of his time to the service of that Order as instructor or examiner of ambulance classes.

Dr. Middlemiss at one time held office as churchwarden at St. Cuthbert's. In politics he was a staunch Conservative.

He leaves a widow, a daughter, and four sons to mourn his loss, and to them will be extended the deep sympathy of a large circle of friends and acquaintances.

A bed in the Dreadnought (Seamen's) Hospital, Greenwich, endowed by Brigade-Surgeon John Law, M.D., I.M.S., for the use of natives of India, at a cost of £1,000, was formally opened last week by Mr. Percival Nairne, Chairman of the Committee of Management.

REVIEWS OF BOOKS.

MIDWIFERY. (a)

When a book reaches the sixth edition a review as to its value is superfluous. Dr. Jellett is to be congratulated upon the excellent standard maintained in his work and the manner in which he has kept each succeeding edition in touch with the advances in the science of obstetrics. The present volume is printed on larger paper, and the type is more spaced, which makes it more pleasant to read. Many of the illustrations are larger and greatly increased in value, in that filled-in drawings have largely replaced the outline illustrations of the previous editions. The letterpress is extensively revised so as to meet the present-day practice of midwifery. Some changes have been made in the order of subjects, with the result that the sections come in better chronological order. For instance, the decidua is dealt with in connection with the ovum instead of in the chapter on "Pregnancy and Its Phenomena." Hyperemesis is rightly included amongst the toxæmias instead of the disorders of pregnancy. In dealing with eclampsia, it is interesting to note that the relative frequency is given as .38 instead of .28 as in the previous edition. The presence of undigested food in the digestive tract is added as a predisposing cause, and the whole treatment revised so as to conform with that adopted at present in the Rotunda.

Cæsarean section is added to the modes of treatment for placenta prævia, but is not advised except in very exceptional cases of central placenta prævia, nearly at term, and with a living child.

Vaccine treatment is more fully discussed, and the manner in which autogenous vaccines may be obtained is described. The operation of ligation or removal of septic thrombotic veins is referred to, as is also extra-peritoneal Cæsarean section. A complete change is shown in the omission of symphysiotomy, which is not described in the chapter on operations, and is also omitted from the alternative methods of treatment which may be adopted in the minor degrees of contracted pelvis.

The book is an improvement on the last edition from the better type and illustrations, and it has fully advanced with the times. It is to be strongly recommended to those for whom it is written—practitioners and students—as a ready and handy volume in which to find the proper and present-day methods of dealing both with normal and abnormal obstetric cases.

DUODENAL ULCER. (b)

Two years have elapsed since we reviewed the first edition of this work of Sir Berkeley Moynihan, which we characterised at the time as an excellent and exhaustive monograph on duodenal ulcer, by one whose surgical achievements in the treatment of the condition entitled him to speak with authority. The second edition, now before us, has been enlarged by about 100 pages and fifteen illustrations. The writer has not made many alterations in the text, but has greatly enhanced the value of his work by the fresh material he has introduced. This chiefly deals with the differential diagnosis of duodenal ulcer and the results of the X-ray examinations of the stomach after a bismuth meal.

The author is not quite so dogmatic about the certainty of correct diagnosis in chronic duodenal ulcer. From the experiences he relates one sees that some little point in the patient's anamnesis missed or not sufficiently weighed may lead to error. But of 100 consecutive cases of operation in which this diagnosis had been made, two proved to be of gallstones and one of gallstones and appendicitis. Another pitfall is ulceration of the stomach. Discussing a cure of the latter, where the symptoms were mistaken for duodenal ulcer, we find, on page 142, "the only discrepancies between the story given by him and the typical history, as I have related it, were that the seasonal variations had never been observed, that the pain in the back had been unremitting, and that the symptoms had been present without intermission for over three years." In Chapter V. the writer has added a section on the treatment of melæna neonatorum by the direct transfusion of blood. This, according to the authorities he quotes, is almost a specific remedy for melæna and other hæmorrhages due to acute anæmia in the newly born, a condition that up to the present has baffled all hope of successful treatment.

(a) "A Short Practice of Midwifery, embodying the Treatment adopted at the Rotunda Hospital, Dublin." By Henry Jellett, B.A., M.D., F.R.C.P.I., Master, Rotunda Hospital. Sixth edition, revised, with four coloured plates and 207 illustrations. Pp. 619. London: J. and A. Churchill. 1913.

(b) "Duodenal Ulcer." By B. G. A. Moynihan, M.S.(Lond.) F.R.C.S. Second Edition, Enlarged and Illustrated. Pp. 486 Philadelphia and London: W. B. Saunders Co. 1912. Price 21s. net.

There is a new chapter on jejunal and gastro-jejunal ulcer. Among other cases the author reports three which came under his care, in one of which he was responsible for the original operation. He describes and illustrates the treatment by excision of the parts. The *technique* of gastro-enterostomy and the local surgical treatment of the ulcer are fully and lucidly described in another chapter.

Throughout the text there are numerous clinical histories, in small print, of personal cases and those published by others. These records are interesting and essential in a work of this kind. The complete notes of the 305 cases operated on by the author are contained in the two appendices, for which Mr. Harold Collinson is responsible. We extract from the latter's "Detailed Statement of Cases Operated On":—"In one instance, case 305, the last of the series, a fatal result occurred. The patient, who was extremely ill and anæmic before operation, died of sudden cardiac failure on the thirteenth day. At autopsy no lesion other than fibroid degeneration of the myocardium could be found to account for death. Between this case and the last fatal case of the previous series (case 112), 192 consecutive operations had been performed without a death." Of 302 cases, 250=82.78 per cent. were cured, 21=7 per cent. improved, and 5=1.65 per cent. died as a result of operation. Comment is superfluous. We congratulate Sir Berkeley Moynihan. His book is worthy of his excellent results, and in every way must appeal to the surgeon, if not to the physician also.

TUBERCULOSIS. (*a*)

This is a very compact and complete volume dealing with all forms of tuberculosis, and is translated from the second German edition by Dr. G. B. Hunt, and should prove of the greatest use to all British medical readers, but more especially to those holding tuberculosis posts, either in sanatoria or in dispensaries.

The subject is treated from a pathological standpoint, and the old distinction of "medical" and "surgical" tuberculosis is discarded. The book has been received with great favour in the land of its birth, as evidenced by the fact that a second edition was necessary within the space of eighteen months. The book contains fifteen chapters, of which the first deals with the ætiology of tuberculosis, the second with pulmonary tuberculosis, and the third with tuberculosis of the pleura. The two latter occupy nearly half of the book, and afterwards follow portions devoted to the digestive organs, the uro-genital organs, the vascular and lymphatic systems, the skin, organs of locomotion, nervous system, eye, ear, miliary tuberculosis, scrofula and tuberculosis in children form the remaining part of the volume.

A valuable part of the work is that in which the authors consider the appropriate tuberculin treatment along with the text in each form of the disease, and for which further aid is to be given in a subsequent edition on "Tuberculin in Diagnosis and Treatment," but in the X-ray diagnosis of tuberculosis the vertical position of the heart, on which radiographers place so much importance, has been omitted. The authors' graphic representation of lung signs is described and illustrated, as also are plates from Cornet's work on the pathological anatomy of tuberculosis of the lungs and larynx, and Robert Koch's immortal record on bacterial diagnosis in his "Ætiology of Tuberculosis."

Altogether this is a splendid work, and the authors are to be congratulated on producing such an authoritative, carefully elaborated and excellent system of condensation, which, together with the absence of unessentials, should make it a helpful guide to all associated in any way with the problem of tuberculosis.

TUMOURS OF THE LUNGS. (*a*)

It is now many years since Stokes devoted a brief chapter in his "Diseases of the Chest" to cancer of the lung, and it is curious how little has been systematically written on the subject since. There have been, indeed, occasional references in periodical literature, though the disease is still held a rare one. Dr. Adler has been able, with much research, to collect only 374 cases of primary carcinoma of the lung. Of these he gives notes in his recent book. He has also collected notes on reported cases of primary sarcoma, of doubtful cases of malignant disease, and of miscellaneous tumours of the lungs. The tables dealing with these cases constitute two-thirds of his book, and will prove useful to anyone wishing to study the subject. The first third of the book is taken up with introductory chapters and some remarks on the pathological and clinical aspects of the disease. It would appear that the great majority of primary cancers of the lung originate in the mucous membrane of the bronchi. On the clinical side the author adds but little to what Stokes taught eighty years ago. Professor Adler's plates representing microscopic appearances are excellent, but those representing gross specimens hardly serve as illustrations. After prolonged study we have been unable to form any conception of what the coloured frontispiece is intended to represent.

INFANT FEEDING. (*b*)

This book represents an attempt to make clear the scientific processes which underlie infant feeding, and to reduce these principles to everyday practice, so that they can be grasped by the ordinary practising physician. It is based on a course of lectures given to the students of Rush Medical College.

The book is divided into four parts. Part I. deals with "the fundamental principles of infants' nutrition." Part II. deals with "the nourishment of the infant on the breast." Part III. deals with "artificial feeding." Part IV. deals with "nutrition under other conditions." In this last part are to be found chapters dealing with such subjects as "The premature infant," "The exudative diathesis," "The spasmophilic diathesis," "The nervous infant," etc.

The author has drawn largely on the works of Finkelstein, of Czerny and Keller, Meyer, Uffenheimers, Freund, etc., and the result is an eminently practical and readable book.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

Arnold, Edward (London).
  A Text-book of Surgery for Dental Students. By G Percival Mills, M.B., B.S.Lond., F.R.C.S., and Humphrey Humphreys, M.B., Ch.B., B.D.S.Birm., L.D.S.Eng. Pp. 340. Price 12s. 6d. net.

Baillière, Tindall, and Cox (London).
  Acute Abdominal Diseases, including Abdominal Injuries and the Complications of External Hernia. By Joseph E. Adams, M.B., M.S.Lond., F.R.C.S.Eng., and Maurice A. Cassidy, M.A., M.D., B.C.Cantab., F.R.C.P.Lond. Illustrated. Pp. 571. Price 12s. 6d. net.

Bale, John, Sons, and Danielsson, Ltd. (London).
  Studies on the Influence of Thermal Environment on the Circulation and the Body-Heat. By Edgar R. Lyth, M.B.Durham, M.R.C.S.Eng. Pp 72. Price 2s. 6d. net.
  Clinical Surgical Diagnosis for Students and Practitioners. By F. de Quervain. Translated from the Fourth Edition by J. Snowman, M.D. Pp. 779. Price 25s. net.

(*a*) "A Clinical System of Tuberculosis." By Drs. Baudelier and Rœpke. London: Bale, Sons and Danielsson, Ltd.

(*a*) "Primary Malignant Growths of the Lungs and Bronchi. A Pathological and Clinical Study." By J. Adler, A.M., M.D. Pp. xii. and 325. Illustrated. New York: Longmans, Green and Co. 1912. Price 16s. net.

(*b*) "Infant Feeding." By Clifford G. Grulee, A.M., M.D. Pp. 295 Illustrated. Philadelphia: W. B. Saunders Company. 1912.

Field Service Notes for R.A.M.C. By Major T. H. Goodwin, R.A.M.C. Price 2s. 6d. net.
The Hunterian Oration. Delivered at the Royal College of Surgeons, 1913. By Sir Rickman J. Godlee, Bart., P.R.C.S., B.A., M.S., M.D.Dub., Hon. Causa, Hon. Surgeon in Ordinary to the King. Price 2s. 6d. net.
Epidemic Infantile Paralysis. By Prof. Paul H. Romer. Translated by H. Ridley Prentice, M.D., B.S.Lond., M.R.C.S. Illustrated. Pp. 208. Price 7s. 6d.

CHEMIST AND DRUGGIST, THE, London.
Provincial Hospital Pharmacopœia. Pp. 288.

CHURCHILL, J. AND A. (London).
Surgical Pathology and Morbid Anatomy. By Sir Anthony A. Bowlby, C.M.G., F.R.C.S. Sixth Edition. Edited with the assistance of Dr. F. W. Andrewes. Pp. 650. Price 10s. 6d. net.
Lang's German-English Dictionary of Terms used in Medicine and the Allied Sciences. Second Edition. Edited and revised by Milton K. Meyers, M.D. Philadelphia, etc. Pp. 564. Price 18s. net.
Obstetric Aphorisms for the use of Students. By J. G. Swayne, M.D. Eleventh edition revised and edited by W. C. Swayne, M.D., etc., etc. Pp. 216. Price 3s. 6d. net.
The Healthy Marriage. By G. T. Wrench, M.D., B.S.Lond. Pp. 300. Price 3s. 6d. net.
Dr. Chavasse's Advice to a Mother. Seventeenth authorised edition revised by T. D. Lister, M.D. Pp. 340. Price 1s. 6d. net.
Book for Mothers on the Management of Children in Health and Disease. By A. M. Usher, with introduction by Francis B. Rutter, M.D., F.R.C.S. Pp. 106. Price 1s. net.

DENT, J. M., AND SONS, LTD. (London).
A Plea for the Thorough and Unbiassed Investigation of Christian Science. By An Enquirer. Pp. 199. Price 1s. net.

EWART, SEYMOUR AND CO., LIMITED (London).
Protein and Nutrition: An Investigation. By Dr. M. Hindbeck. Pp. 201. Price 7s. 6d. net.

CORNISH BROS. (Birmingham).
Contributions to Practical Medicine. By Sir James Sawyer, M.D. Fifth Edition. Revised. Pp. 410.

FORSTER GROOM AND CO., LIMITED (London).
Hints for Regimental Medical Officers of the Territorial Force. By Captain M. F. Grant, R.A.M.C. Pp. 39. Price 1s. 6d.

FROWDE, HENRY, AND HODDER AND STOUGHTON (London).
Cancer of the Breast. By Charles B. Lockwood, F.R.C.S. Pp. 234. Price 10s. 6d. net.
Manual of Bacteriology. By R. Muir, M.A., M.D., and J. Ritchie, M.A., M.D. Sixth Edition. Illustrated Pp. 736. Price 10s. 6d. net.
The Principles and Practice of Medical Hydrology. By Fortescue Fox, M.D.Lond. Pp. 295. Price 6s. net.
Surgical Experiences in South Africa, 1899-1900. By G. H. Makins, C.B., F.R.C.S. Second Edition. Pp. 504. Price 10s. 6d. net.

KIMPTON, HENRY (London).
Asthma and its Radical Treatment. By James Adam, M.A., M.D., F.R.F.P.S. Pp. 184. Price 5s. net.

LEWIS, H. K. (London).
The Bradshaw Lecture on the Diagnosis and Treatment of Incipient Pulmonary Tuberculosis. By David Bridge Lees, M.D.Cantab., F.R.C.S.Lond. Pp 116. Price 5s. net.
The Place of Climatology in Medicine being the Samuel Hyde Memorial Lectures. By William Gordon, M.O., M.D., etc. Pp. 62. Price 3s. 6d. net.

LIPPINCOTT, J. B., Co. (Philadelphia and London).
Mechanical Treatment of Abdominal Hernia. By William Burton De Garmo, M.D. Illustrated. Pp. 147. Price 6s. net.
International Clinics. A Quarterly of Illustrated Clinical Lectures. Edited by Henry W. Cattell, A.M., M.D. Vols. 1 and 2. Twenty-third series. 1913. Price 35s. net per year. Four volumes.

LONGMANS, GREEN AND CO. (London).
London Public Health Administration. By W. M. C. Wanklyn, B.C.Cantab., etc., etc. Pp. 59. Price 2s. 6d. net.

REBMAN, LTD. (London).
A Course in Normal Histology. By Rudolf Krause. Translated by P. J. R. Lehmahl, M.D., New York. Illustrated. Pp. 86. Price 5s. net.

W. B. SAUNDERS COMPANY (Philadelphia).
Diet Lists of the Presbyterian Hospital, New York City. By Herbert S. Carter, M.D. Pp. 129. Price 5s. net.

SCOTT, GREENWOOD AND SON (London).
Disinfection and Disinfectants. By M. Christian Translated from the German by Charles Salter. Pp. 107. Price 5s. net.

SMITH, ELDER AND CO. (London)
How to Diagnose Smallpox. By W. M. C. Wanklyn, B.A.Cantab., M.R.C.S., L.R.C.P., D.P.H. Illustrated. Pp. 104. Price 3s. 6d. net.

SOCIETE D'EDITIONS SCIENTIFIQUES ET MEDICALES. (Paris.)
Therapeutique des Cliniques de la Faculte de Paris. Edited by M. Laignel-Lavastine. Vol. 1. Pp. 739.
Precis d'Anesthesie Locale. By G. Piquand. Pp. 263.
Archives Urologiques de la Clinique de Necker. By F. Leguen. Pp. 120.

THE NATIONAL ANTI-VACCINATION LEAGUE (London).
Leicester: Sanitation versus Vaccination. By J. T. Biggs, J.P. Pp. 784.

WILEY, J., AND SONS (New York). CHAPMAN AND HALL (London).
Resuscitation from Electric Shock, Traumatic Shock, Drowning, Asphyxiation from any Cause. By C. A. Lauffer, A.M., M.D. Pp. 47. Price 2s. net.

WOMEN'S INDUSTRIAL COUNCIL (London).
How to Take Care of the Sick at Home. By W. and S. Rintoul, with preface by Sir Victor Horsley. Pp. 30. Price 1d.
How to Take Care of the Baby. By Selina F. Fox, M.D., B.S., with preface by Eric Pritchard, M.A., M.D. Pp. 25. Price 1d.

MEDICAL NEWS & PASS LISTS.

The XVIIth International Congress of Medicine.

THE Permanent Commission of the Seventeenth International Congress of Medicine has announced that the next Congress will take place in Munich in 1917, under the presidency of Professor Friedrich von Müller, of Munich.

It is further announced that the Congress Prizes have been awarded as follows:—

The Moscow Prize, to Professor Charles Richet, of Paris, for his work on Anaphylaxis.

The Paris Prize, to Professor A. von Wassermann, of Berlin, for his work on experimental therapy and on immunity.

The Hungary Prize, to Professor A. E. Wright, of London, for his work on Anaphylaxis.

Royal College of Surgeons in Ireland—Post-Graduate Course.

THE autumn post-graduate course of the Royal College of Surgeons in Ireland has again been rearranged, in accordance with the suggestions of a number of those interested. It has been found in practice, that general practitioners, especially those in country districts and small towns, are usually very desirous of obtaining the benefits of post-graduate courses, but are unwilling to devote three weeks of their annual holiday to a post-graduate course as usually arranged. The Committee, therefore, with this in view, have divided the course, as last year, into three sections: Medical, lasting one week; Special, including Gynæcology, three days; Surgical, ten days; so that one may take either the whole course or any part of it, and if time is limited one could take a different section each year with very little extra expense and without trespassing too much on one's annual holiday. The course begins on 22nd September and lasts till 13th October, 1913.

The Caledonian Medical Society.

THE thirty-third annual meeting of the Caledonian Medical Society was held on Monday last at King's College, Strand, under the presidency of Dr. M. Cameron Blair, of Northern Nigeria. This was the fifth occasion on which the annual meeting had been held in London, the last being ten years ago. Since then the Society—composed of Scottish medical men—has made great strides. There were two presentations—a gold badge of office for the President, given by twenty-one past holders of the chair, and a curiously-formed silver, oak and jewelled loving-cup by the members of the Society.

Colonel Macdonald, of Inverness; Dr. W. A. Macnaughton, of Stonehaven; and Dr. D. Rorie, of Cults, had been responsible for the carrying out of the details of the cup, which is a replica of one preserved in Dunvegan Castle, dated 1493, and referred to in Sir Walter Scott's "Lord of the Isles." The original, known as the Dunvegan Cup, is regarded as one of the greatest curiosities in Scotland.

The President delivered an address on David Livingstone, whom he described as one of the most noted of Caledonian medical men.

At the annual dinner at the Hotel Cecil Dr. M. Cameron Blair presided over a distinguished and representative company.

King's College Hospital Medical School.

In view of the increased amount of instruction which is to be given in the new hospital at Denmark Hill beginning on October 1st next, the following additional appointments have been made:—

Norman Dalton, M.D., F.R.C.P., Lecturer on Medicine; F. W. Tunnicliffe, M.D., M.R.C.P., J. Charlton Briscoe, M.D., M.R.C.P., and H. W. Wiltshire, M.A. M.D., M.R.C.P., Lecturers on Practical Medicine; F. W. Tunnicliffe, M.D., M.R.C.P., Lecturer on Therapeutics and Applied Pharmacology; G. Lenthal Cheatle, C.V.O., C.B., F.R.C.S., joint Lecturer on Surgery; T. Percy Legg, M.B., M.S., F.R.C.S., Lecturer on Operative Surgery; Hugh Playfair, M.D., M.R.C.P., F.R.C.S., Lecturer on Gynæcology; H. Willoughby Lyle, M.D., B.S., F.R.C.S., Lecturer on Practical Ophthalmology; G. J. Jenkins, M.B., C.M., F.R.C.S., Lecturer on Practical Otology; J. F. W. Silk, M.D., Lecturer and Instructor in Anæsthetics; G. B. Flux, M.D., Instructor in Anæsthetics; P. B. Ridge M.B., B.Ch., Lecturer on Morbid Anatomy and Histology, and Curator of the Museum; Robert Knox, M.D., C.M., Teacher of Radiography.

The following additional appointments have been made to the staff of King's College Hospital:—Hugh Playfair, M.D., M.R.C.P., F.R.C.S., promoted to the position of Obstetric Physician; Sir Ronald Ross, K.C.B., M.D., D.Sc., F.R.S., to be Physician for Tropical Diseases; Robert Knox, M.D., C.M., to be Radiographer; R. W. A. Salmond, M.D., M.Ch., D.P.H., to be Assistant Radiographer; E. B. Clayton, M.B., B.S., to be Medical Officer in charge of the Department of Massage and Electro-Therapeutics; G. W. Shore, M.R.C.S., L.R.C.P., to be Sambrooke Medical Registrar; H. P. Ashe, M.R.C.S., L.R.C.P., to be Resident Casualty Officer.

SCHOLARSHIP AND PRIZE EXAMINATIONS, 1913.

Senior Scholarship, Mr. C. F. Hacker; Medicine Prize, Mr. A. E. Panter; Obstetric Medicine Prize, Mr. F. H. Mosse; Forensic Medicine Prize, Mr. F. H. Mosse; Todd Prize, Mr. E. W. Carrington; Clinical Surgery Prize, Mr. F. H. Mosse; Tanner Prize, Mr. E. W. Carrington; Diseases of Children, M. C. F. Hacker.

Attack on a Prison Medical Officer.

OUTSIDE Holloway Prison last Saturday an attempt was made to attack Dr. Pearson, the Medical Officer of Holloway Prison, by four militant suffragists. Dr. Pearson was crossing the road to the prison, when the four women, who had been waiting outside, dashed at him, one of them producing a heavy ivory handled riding crop, which she had concealed beneath her cloak. Before the women could succeed in their attempt to assault the doctor, however, the police on duty outside the prison interfered. At the same moment four or five women—not suffragists—who had just been discharged from prison, came out of the gates; they at once took the doctor's part, and with their assistance and that of the police Dr. Pearce was able to enter the prison in safety. The discharged prisoners then attacked the four suffragists, who eventually took refuge on a passing omnibus. Later on in the day, two windows in the house in Hilmarton Road, N., of Dr. Pearson were smashed by suffragists, who threw bricks through the panes. No arrests were made.

A New Medical Scholarship.

THE Corporation have decided to found in connection with the City of London School a medical scholarship of the value of £40 a year for four years, tenable at St. Thomas's Hospital, on the understanding that a similar scholarship is provided by the governing body of the hospital.

Death after an Injection of Salvarsan.

AN inquest was held at Westminster last week on the body of Mr. John Rogers Vinton Gilliat, aged 42, an American, who died at his apartments in Eaton Terrace, Eaton Square.

Francis August, in whose house Mr. Gilliat was staying, stated that on Friday and Saturday he was very queer. There was something the matter with his throat. On Saturday morning he summoned a doctor by telegram. He appeared to be in great pain, and he became much worse before the doctor came.

Mr. Cyril Nitch, surgeon, of Harley Street, said that Mr. Gilliat consulted him first in November, 1912. He said he had been suffering for 24 years and had been treated by doctors on the Continent, having had all the recognised treatment by drugs. He had had a recurrence of his trouble, and had been advised to have an injection of salvarsan. After satisfying himself that Mr. Gilliat was a suitable subject, he made the injection on January 6th, using six grains of the fluid. A full dose was nine grains, but he never gave a full dose of that particular drug. A few hours after the injection the patient left the home in good condition. On July 25, when he next saw Mr. Gilliat, he said he felt better than he had felt for years. There was, however, something wrong with his tongue, and the witness told him he could choose between treatment by drugs or another injection. He eventually decided to have another injection. The witness examined him, and on July 29th gave him another injection of six grains. No bad symptoms followed, and the next day Mr. Gilliat said he was perfectly well. On the morning of August 2nd he found him in bed. He was restless and very cold, and complained of pains everywhere. The witness called in another doctor, infused the patient with saline, and injected strychnine, morphia, etc., to allay the pain. He and the other doctor remained with him all day, and he also called in Dr. Willcox, the expert in poisons, who said he had no further advice to give regarding the treatment. That was between 4.30 and 5.30 p.m.; death took place at 8 p.m. He thought that death was due to delayed poisoning, caused by the arsenic in the injection. The case was a curious one, as there were no symptoms of arsenical poisoning until three days after the last injection.

Dr. R. S. Trevor, who made a *post-mortem* examination, attributed death to heart failure while the patient was suffering from general blood poisoning. Having heard Mr. Nitch's evidence, he was of opinion that the blood poisoning was due to the injection of salvarsan, which contained arsenic—arsenical poisoning.

The jury returned a verdict of "Death by misadventure," and expressed the opinion that Mr. Nitch had acted in a proper and skilful manner.

Small-Pox in Sydney, New South Wales.

WE are requested to announce that the Agent-General for New South Wales has received the following telegram, dated Sydney, August 2nd, from the Premier of the State:—"The Director-General of Public Health reports that the small-pox epidemic now existing in Sydney is of very mild type, similar to that in Canada. There have been 400 cases, no deaths, and no patient has been dangerously ill."

Royal Army Medical Corps.

THE War Office has issued the following list of successful candidates, arranged according to merit, for commissions in the Royal Army Medical Corps at the competition held in London during July, for which 21 candidates entered:—E. W. Wade, M.B., B.S. Lond., B. Woodhouse, M.R.C.S., L.R.C.P.Lond., W. K. Morrison, M.B., Ch.B.Edin., E. Percival, M.B., Ch.B.Edin., H. C. D. Rankin, M.B., Ch.B. Glasg. Messrs. Woodhouse, Morrison and Percival being in possession of certificates obtained in the Officers' Training Corps, were awarded service marks under paragraph 71 of the Regulations for the Officers' Training Corps.

London School of Tropical Medicine.

THE following candidates have passed the examinations during July, 1913:—With distinction: E. C. Perkins, M.D., Col. U.S.A., H. H. D. Knapp, M.D., Capt. I.M.S., C. N. Davis, M.B., B.S.Lond., D.P.H., J. E. H. Gatt, M.R.C.S., L.R.C.P., D.P.H., Capt. R.A.M.C., W. E. Glover, M.B., Ch.B.Aberd. Ordinary pass: J. Hannington, M.R.C.S., L.R.C.P., Mrs. D. Parsons, M.D.Edin., W. L. Webb, M.R.C.S., L.R.C.P., G. Dunderdale, M.D.Lond., M.R.C.S., B. B. Paymaster, L.R.C.P., M.R.C.S., Capt. I.M.S., R. Trudinger, M.D., B.S.Adelaide, W. E. S. Digby, M.R.C.S., L.R.S.C., H. North, M.R.C.S., J. A. Valentine, M.D., R. P. Ratnaker, L.M. and S., G. da Silva, L.R.C.P., L.M. and S., H. H. Stewart, M.B., Ch.B.Edin., P. J. Zepeda, M.D., I.M.C., J. M. Cure, M.B.Lond., A. Robertson, M.B., Ch.B., D.P.H., E. V. Smith, L.R.C.P., L.R.C.S.Edin., C. E. F. Mouat-Biggs, M.R.C.S., H. E. Fretz, L.R.C.S. and P.Edin., J. B. Dalzell Hunter, M.B., Ch.B.Glasg., Capt. I.M.S., R. H. Miller, M.R.C.S., L.R.C.P., J. Dunlop, M.B., B.Ch., C. R. Patton, M.B., Ch.B., O. Arnott, M.B., B.S.Durh., C. S. G. Mylrea, M.D., C. J. H. Pearson, M.R.C.S., L.R.C.P., J. Y. Ferguson, M.D., C.M., B. W. F. Wood, M.B., Ch.B.Leeds

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THEN AND NOW.

Patient: I remember you cured me of the same trouble a dozen years ago; why don't you use the same treatment now?

Doctor: A dozen years ago, he echoed. My dear Sir, the medical profession has made wonderful strides since then, and I could'nt think of such a thing.—"Everyone's Story Magazine" for August.

INTERNATIONAL EXHIBITION OF HYGIENE AT LIMA.

An international exhibition of Hygiene will be held at Lima, Peru, from November 2nd to December 31st of this year. Exhibits will be received of pharmaceutical goods, apparatus, machines, milks, foods and everything connected with the preservation of health, and the Peruvian Government will exonerate all such exhibits from Consular fees. Requests for space and position may be sent until September 17th. Any further particulars needed will be supplied by any Peruvian Consulate in the United Kingdom, or will be forwarded on application to the office of the Medical Congress, Plaza de la Exposicion, Lima.

Dr. H. D. M.—The report appeared in a contemporary, we cannot therefore insert your letter of correction, as the erroneous statement was not published in our columns.

S. W. R. (Bournemouth).—The use of a suitable depilatory is unattended by any risk, or indeed by any inconvenience. We append a formula which can be used for removing hairs from moles or from the skin of the limbs of young women without exerting any noticeable irritating effect on the skin. Some caution, however, is necessary in applying it to more sensitive parts, such as the upper lip, scrotum, etc.:—℞ barium sulphide 5 parts, powdered iris root 5 parts, zinc oxide 10 parts, powdered starch 10 parts. These ingredients are thoroughly mixed and when about to be used are made into a thin paste with a minimum of water and forthwith applied to the hirsute surface. Wash off in two or three minutes when the hairs will have disappeared. The only objection is a powerful odour of sulphuretted hydrogen—in the air, not on the arm.

Pensator.—Experimental inquiry has shown that gall-stones, chiefly composed of cholesterine, are soluble in normal bile.

Double Qualification.—The clause in the bond mentioned is too explicit to leave any doubt as to its intention.

House Surgeon.—Our correspondent is advised to write a private note to the coroner, asking him to reconsider the claim.

F.R.C.S.Edin. (London, S.W.).—The dog is stated to be three times more liable to tuberculosis than the cat, and 500 times more so than the horse, which, though not absolutely immune, is rarely attacked.

THE LEAGUE OF MERCY.

The annual report of the League of Mercy shows that the receipts last year amounted to £21,708, being an increase over the previous year of £1,492. Of this total, £18,000 was given to King Edward's Hospital Fund for London and £2,305 to various county and other hospitals.

Since the formation of the League of Mercy in 1899, upwards of £200,000 has been distributed—£188,000 going to King Edward's Hospital Fund, and £12,066 to extra-Metropolitan hospitals in districts working for the League. The two districts heading the list last year were South Kensington, which collected £1,375, and South Paddington, £1,220. Each year a larger number of hospitals decide to keep their accounts on the uniform system. In this way, alone, an accurate knowledge of the relative economy and efficiency of each participating charity is obtainable.

Dr. P. N. T. (Devon).—The sugar derivative known as hediosite has been shown by Professor Rosenfeld, of Breslau, to be one of the least harmful of all the carbohydrates to diabetic patients. It may be given to the extent of two ounces per diem, or even more.

Appointments.

Burton, A. H. G., M.D.Lond., D.P.H.Camb., Tuberculosis Officer and Assistant Medical Officer of Health for the Metropolitan Borough of Deptford.

Bywater, H. Haward, M.D.Vict., F.R.C.S.Edin., D.Ch.O.Liverp., Assistant Honorary Surgeon to the Liverpool Eye and Ear Infirmary and Assistant Honorary Surgeon to the Eye, Ear, and Throat Department of Wigan Royal Infirmary.

Clark, A. J., M.B.Cantab., M.R.C.P.Lond., Lecturer in Pharmacology to Guy's Hospital

Curtis, Henry, B.S.Lond., F.R.C.S.Eng., Surgeon to the Metropolitan Hospital, Kingsland Road, N.E.

Langran, W., L.R.C.P. and S.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Axminster District of the county of Devon.

Locke, [illegible]. Lindsay, M.B., Ch.B.Edin., Senior Medical Radiographer to Guy's Hospital.

Macrae, Farquhar, M.B., C.M.Aberd., Tuberculosis Officer for the County of Aberdeen.

Metcalfe, James, M.D.Brux., L.R.C.P. and S.Edin., Medical Officer in charge of the X-Ray Department of the German Hospital, London.

Mitchiner, P. H., M.B., B.S.Lond., House Surgeon at St. Thomas's Hospital.

Parkinson, John, M.D., B.S.Lond., M.R.C.P.Lond., Special Assistant to the Heart Department of the London Hospital.

Pickard, Ellen Mary, M.D., B.S.Lond., Assistant to the Clinical Pathologist at the Royal Free Hospital.

Richards, Maude M., M.B., B.S.Lond., Assistant to the Clinical Pathologist at the Royal Free Hospital.

Vacancies.

Herts County Asylum, Hill End, St. Albans.—Second Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Bristol Royal Infirmary.—House Physician. Salary £100 per annum, with apartments, board, and laundry. Applications to W. E. Budgett, Secretary and House Governor.

Bristol Royal Infirmary.—House Surgeon. Salary £100 per annum, with apartments, board, and laundry. Applications to W. E. Budgett, Secretary and House Governor.

Bradford Royal Infirmary.—House Physician. Salary £100 per annum, with board, residence, and washing. Applications to J. J. Barron, Secretary-Superintendent.

Monmouthshire Asylum, Abergavenny.—Second Assistant Medical Officer. Salary £225 per annum, with board, furnished apartments, washing, and attendance. Applications to the Medical Superintendent.

Oxford County Asylum, Littlemore, near Oxford.—Assistant Medical Officer. Salary £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent.

Devon County Asylum.—Junior Assistant Medical Officer. Salary £200 per annum, with furnished quarters, board, and laundry. Applications to the Medical Superintendent of the Asylum, Exminster.

Manchester Royal Infirmary.—House Surgeon. Salary £100 per annum, with board and residence. Applications to Walter G. Carnt, General Superintendent and Secretary.

Leeds Public Dispensary.—Junior Resident Medical Officer. Salary £100 per annum, with board and residence. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Royal South Hants and Southampton Hospital.—House Surgeon. Salary £100 per annum, with rooms, board, and washing. Applications to T. A. Fisher Hall, Secretary.

Wolverhampton and Staffordshire General Hospital.—House Surgeon. Salary £125 per annum, with board, furnished rooms, and laundry. Applications to J. Stephen Neil, House Governor and Secretary, Wolverhampton.

Births.

Bahr.—On August 2nd, at 50 Iverna Gardens, Kensington, W to Dr. and Mrs. P. H. Bahr—a daughter.

Taylor.—On August 4th, at La Jaspellerie, Sark, Channel Islands, the wife of Ashby Taylor, Medical Officer of Sark, of a son.

Unwin.—On August 4th, at Penn Hill, Yeovil, the wife of Harold R. Unwin, F.R.C.S.Eng., of a son.

Marriages.

Maunsell—Peile.—On August 9th, at St. Peter's, Cranley Gardens, Captain Eustace Ball Maunsell, 35th Scinde Horse, elder son of Colonel C. A. Maunsell, R.A.M.C., to Mary Braithwaite, eldest daughter of the late Charles Peile and Mrs. Peile, of 14 Queen's Gate Gardens.

Deaths.

Fox.—On August 5th, at Holly Bank, New Brighton, Edward Austin Fox, M.D.Durh., J.P., L.R.C.P. and S.Edin., aged 68.

Grey-Edwards.—On August 5th, at Bank Place, Bangor, Henry Grey-Edwards, B.A., M.D.Dub., aged 57.

Middlemiss.—On August 4th, at his residence, Wear Court, Darlington, George Middlemiss, M.D., V.D., aged 68 years.

Pell-Ilderton.—On July 26th, at Saxonholme, Higher Openshaw, Manchester, Harry Pell-Ilderton, L.R.C.P. and S.Edin., aged 61.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, AUGUST 20, 1913. No. 8.

NOTES AND COMMENTS.

The Government Moves.

THE announcement that a Royal Commission has been appointed by the Government for the institution of an inquiry into venereal diseases will be hailed with profound satisfaction, not only by the medical profession, but also by all who have the interests of the public health at heart. The exact terms and scope of the inquiry to be set up are still under consideration, but, presumably, the members of the Commission will include some of the signatories of the important medical manifesto to which we referred in our last issue. This preliminary investigation by the Government cannot fail to be the beginning of a new era in the treatment of syphilis and allied diseases, and now that public opinion has been stirred to some extent by the publication of the appeal in the columns of two important daily newspapers, there is every hope that a great national campaign against what Lord Morley has characterised as "this hideous scourge" will now be commenced. Whether or not a system of confidential notification of venereal diseases be advisable in this country is debatable, but that these affections can be controlled in a community is exemplified by the experiences in India, Egypt and Malta of Major H. C. French, R.A.M.C., whose thoughtful paper read at the International Congress of Medicine contained many valuable suggestions. At any rate, no time should be lost in educating and protecting the public in regard to a disease which is just as much worthy of organised effort as tuberculosis. In yielding to the urgent demands of the medical profession in a matter affecting the public health so greatly, the Government may be heartily congratulated for its action which should command the approval of every section of the community.

Amateur Doctoring.

SOMETHING of a sensation, at least from the point of view of the man in the street, was afforded by Dr. A. L. Soresi, of New York, in his paper on "Preventive Medicine Attainable Only by Compulsory General Medical Education," read before the Section of Hygiene and Preventive Medicine on the final day of the Congress last week. He pleaded that people should "be taught to study medical questions just as they are all taught to read and write." This statement can hardly be taken seriously, for it is quite contrary to the generally accepted idea among the profession that the general public should be encouraged to dabble in things medical. More harm than good invariably results from amateur doctoring—which, after all, is only a species of quackery—for it is manifestly absurd to suppose that an untrained person possessed of average intelligence can understand those therapeutic intricacies and appreciate all the knotty points of diagnosis that frequently baffle the skill of a medical man who has studied these problems for many years. It is true that the public are generally very ignorant of the simplest anatomical and physiological facts and make the most ludicrous mistakes when attempting to locate their symptoms. There can be no harm in educating the young in classes in elementary physiological facts; on the contrary, such knowledge is likely to be of some practical use. Similarly, instruction, judiciously imparted, in first aid and home nursing is of real public utility, and it cannot be said to make for quackery directly. It would serve no good purpose, however, to render such studies compulsory upon all. Let the layman learn the position of his liver, by all means, and also its functions, but do not arm him with a sheaf of prescriptions for "biliousness."

The "Stock Mixture."

THE principle of time-saving has crept into medical practice in many directions, and this is illustrated best, perhaps, in the art of prescribing. Quite early in his medical career the student acquires the habit of writing "Mist. F.A.," to signify the "Mistura Ferri Apериens" of his hospital pharmacopœia, and he would probably be voted something of a nuisance were he to write out an elaborate prescription for every out-patient with all sorts of odd quantities minutely specified. The work of dispensing for many hundreds of patients daily at the large hospitals is truly Herculean, and, in order to save unnecessary labour, it is absolutely necessary that "stock mixtures" should be prepared of proved efficacy in certain types of disease. Little would be gained, in the vast majority of cases, if the prescription were specially written, for it is quite a simple matter to add an extra ingredient or to direct the omission of another, as occasion demands. In a large general practice the same question arises, and the "stock mixture"—*e.g.*, "Mist. Tussis" or "Mist. Stomachica"—is such an old inhabitant of the surgery shelves that to dislodge it from its old place would be exceedingly difficult, and it is doubtful whether its banishment would lead to greater efficiency in treatment. It is reported that the question was brought up at a recent meeting of the Council of the Pharmaceutical Society, and that a resolution deprecating the practice of prescribing in this fashion was carried. If the chemists like to make work for themselves, all well and good; but it is surely within the discretion of the medical practitioner to prescribe as he believes will be in the best interests of his patients, and of this he alone is the best judge. A good "stock mixture," composed of carefully selected drugs, each acting in a known manner, and whose virtue has been proved over and over again, is a totally different thing from a proprietary remedy, the actual composition of which may or may not be known. There are circumstances, of course, in which it would be unwise to order a "stock mixture," but, on the whole, it may be stated, without fear of contradiction, that a medicine so prepared is indispensable to medical practice.

LEADING ARTICLES.

THE TURN OF THE MEDICAL KALEIDOSCOPE.

FEW great discourses that have been given of late by distinguished leaders among the medical profession have provided so much food for reflection as the Address in Surgery before the 17th International Congress of Medicine delivered by Professor Harvey Cushing, of Harvard University, a full abstract of which is published in the present issue of this journal. A greater defence of experimental research has, probably, never been more eloquently made by any medical man speaking before a medical audience. The whole range of preventive medicine in every clime was reviewed by Professor Cushing, who showed at every step the beneficial results that have accrued to mankind as a direct result of experiments upon animals. Such practical advances as the ridding of a malarious district of mosquitoes, the demonstration of the causes of tuberculosis and syphilis, the methods of preventive inoculation—to name only a few recent achievements of medical science—would not have been possible but for the fact that the lower animals have been made the subject of painstaking experimentation for man's sake. The chemical pathologist has allied his skill with the bacteriologist and the entomologist in order to assist in unravelling some knotty point of ætiology or diagnosis. The so-called methods of vivisection are none other than those practised upon human beings, and who will deny that these same methods, whose primary object is the study and cure of disease, have benefited not only man, but also the lower animals themselves? Of the general relations of medicine and surgery much the same idea was expressed by Professor Cushing as Sir Berkeley Moynihan in his Address in Surgery, delivered at Brighton, on "The Gifts of Surgery to Medicine" [*vide* THE MEDICAL PRESS AND CIRCULAR, August 6th, 1913, p. 141], *i.e.*, the "surgicalisation" of many branches of internal medicine within the last few years. Far from separating internal medicine and surgery, Professor Cushing believes that these are actually converging, because the treatment of disease is gradually becoming less empirical. Surgical specialisation is the order of the day, but it might be well if those who confine themselves rigidly to the practice of one branch of surgery could now and then become absorbed in general surgery, to re-emerge with fresh conceptions of disease and its treatment. Another point touched upon in the Congress address is the rapidly-vanishing tendency to disparage the use of instruments of precision in medical and surgical practice. Although the *tactus eruditus* is a priceless gift, both to the physician and to the surgeon, yet no practitioner who wishes to do the best for his patient can afford to dispense with the assistance provided by modern scientific apparatus and other laboratory accessories. A graphic description is given of the contrast seen to-day between the modern methods of investigating a difficult case and the old-fashioned routine of the mere prescription and a medicine bottle! It must not be supposed, however, that the most perfect instrumental *technique* can ever wholly supplant the habit of acquiring clinical knowledge by means of the unaided senses. Though times are moving fast and the kaleidoscope of surgery as well as of medicine is continually shifting, Professor Cushing has aptly reminded us that the present realignments of medical science may be nothing more than fleeting re-arrangements of older methods.

THE SURGERY OF THE FUTURE.

SINCE Carrel showed it to be possible to preserve organs and tissues outside the body, if not indefinitely, at any rate for a long time, to get them to grow and, on restoration to the body, to start a fresh lease of functional existence, the limits of surgery have been hugely widened. Not indeed that it has as yet become possible to exchange old kindeys for new or to acquire a brand new reproductive apparatus in exchange for certain fees and emoluments. No, that we fear is never likely to come to pass, but we are justified in asserting that Carrel's experiments have rendered such things conceivable, which, before, they were not. How do matters stand? Well, he can remove both kidneys, ureters and a portion of the bladder in a dog, resect the arteries and veins, smear them with vaseline, and put them aside to air, all this for some hours, then restore them to their rightful owner and within twenty-four hours or so the animal is running about, secreting and ejecting urine in the most approved fashion, and "lives happy ever after,'' at any rate for two years, as shown by actual observation. This doubtless is brilliant, regarded as a feat of surgery, but from any other point of view it is mere waste of energy. No one wants his kidneys taken out and put back again, as an exhibition of surgical gymnastics. What he wants—if he wants anything—is to substitute another set for those which have gone on strike and unfortunately this is precisely what, for the time being, even Dr. Carrel is unable to accomplish. This is the more disappointing because, as a matter of fact, he can and does exchange the organs aforesaid as between two dogs, and for some days or weeks everything progresses admirably, but—and this "but" is aggravating—in a fortnight or so the transplanted kidneys set up nephritis, to which the animals succumb. In other words, there is something in one's own organs which is distinct from alien organs, however similar in race and age they may be. Doubtless there are beings so similar in build and function that this transfer would prove successful, only, so far, he has not lighted upon the ideal pair. This point is all-important, because until the cause of this incompatibility has been elucidated Carrel's surgical legerdemain must fail to realise what we are all so eagerly looking forward to, viz., the possibility of repairing the human machine as the parts deteriorate, just as we do in an engine. If this difficulty can be overcome, if we can, piece by piece, replace peccant organs and tissues, a quasi-immortality would be within measurable distance. Whatever results in this direction be achieved by further research, however, we are never likely to emulate the state of the umbrella of which, in consequence of repeated replacements, nothing of the original remained. There is a humorous aspect to this question, an element usually conspicuous by its absence in matters appertaining to surgery, but the underlying facts are solidly established and have been verified by numerous competent and potentially hostile critics. For instance, the surgeon need no longer appeal to reluctant relatives or friends to part with scraps of skin for grafting purposes, since Dr. Carrel is in a position to supply unlimited quantities of fœtal skin, guaranteed free from spirochæte and tubercle bacillus, preserved by cold storage, and fit in every respect for the purpose in view. He has bits of aorta and vena cava which can be utilised as substitutes for damaged segments with every assurance of success, in fact there is no tissue which has proved recalcitrant to his surgical tricks. It is only the highly differentiated, alien organ which, for the time being, cannot be induced to "accept service" for more than a limited space of time. The application of "cold storage" to the preservation of tissues and organs recalls Hunter's famous theory that, as freezing entailed no destruction of organs, there was no reason why, on thawing, vitality should not return, a theory which he was anxious to try on himself and would doubtless have done so had not anxious friends prevailed on him to try it first on an animal, an experiment which yielded disappointing results. Possibly, however, the last word on this subject has not yet been said, for we are plainly only on the threshold of a new departure, pregnant with unimaginable consequences.

CURRENT TOPICS.

Protective and Curative Typhoid Vaccination.

The employment of anti-typhoid vaccine for protective, as well as for curative purposes, is receiving a great deal of attention in France at the present time. Although there are rival claimants for the public favour that vaccine employed in the French army and navy and colonial forces, known as Vincent's polyvalent vaccine, is the only one which so far has been enabled to demonstrate its efficacy, no doubt, because its inventor is the chief medical officer of the French Army. This vaccine is a suspension of typhoid bacilli, sterilised by heat, so that it is of the nature of a chemical solution. Curiously enough one of the results of the early attempts at protective vaccination against typhoid fever was to emphasise the fact that the disease is not a morbid entity, that the clinical symptoms and pathological signs of ordinary typhoid may be produced by several distinct species of bacillus, which do not react to the same biological test. Hence the necessity for making the vaccine polyvalent, or as nearly so as may be. Vincent's polyvalent vaccine is a suspension of typhoid bacilli killed by a high temperature and, therefore, perfectly sterile. Its strength is calculated according to the number of contained bacilli, which are counted in the same way as blood corpuscles. For protective purposes a hundred million may be injected under the skin, generally over the insertion of the deltoid, but the vaccine is also employed for curative purposes and then it becomes necessary to proceed very cautiously, not more than six or ten million being administered every five days. Used prophylactically, the results have been most brilliant, indeed, absolutely convincing, so much so that the method is bound to come into general use for the purpose of protecting populations in epidemic periods, and to prevent the infection of nurses, students and others in attendance upon the typhoid sick. There is every reason to believe, moreover, that, employed for therapeutical purposes, the vaccine materially reduces the mortality, but the results, though distinctly encouraging, cannot as yet be regarded as absolutely conclusive.

Noble Simplicity.

There is no doubt we are different from what we were. Whether we are catching up on our ideal or whether our reality is slipping from our grasp is another story. To-day we are all meteorists. Optimism is in the air, and we are trying to solve life's harder questions by analysis. We have seen the tendency at the Medical Congress. Learned men have discussed simple things. They studied sea-bathing and street noises with an enthusiastic modesty that is likely to make good, and they realised the importance of everyday things that an old time physician would have thought beneath his dignity and would never have mentioned seriously, at any rate in plain language. Medicine is getting less of a mystery every day. Abracadabra and hey presto have lost their therapeutic reputation. It is a good thing, both for the profession and the people. But the latter still require education. They will not understand that their body is comprehensible. Hence the success of quacks and their vain verbosity. All the same, the man who knows is coming into his own, and the laity will soon see that a doctor whose words they can understand may be just as efficient as one who suffers from a lingual diarrhœa of the lienteric type.

The Treatment of Rheumatoid Arthritis.

The failure of treatment to ameliorate that distressing infective polyarticular affection known generically, as rheumatoid arthritis, is in all probability due, in great measure, to the fact that the same treatment is applied in all cases. Now each case must be dealt with on its merits, so to speak, tentatively. In some, sufficient and persistent doses of an organic compound of arsenic will work wonders, though falling short of complete cure. Other cases prove strikingly amenable to the cautious but persevering administration of thyroid extract, more particularly what we may call the florid cases, in which the patient displays more or less pronounced obesity. In febrile cases with a tendency to emaciation, the vaccine treatment appears to be indicated, though this department of therapeutics is still in the experimental stage. In this last named category of cases remarkable improvement has sometimes been noted from the intravenous or intramuscular injection of colloid silver. We must, therefore, not regard rheumatoid arthritis as an incurable disease though, on the other hand, it is admittedly at times a very refractory affection. It is hardly necessary to add that the success of any treatment is conditional on the removal of any manifest source of chronic intoxication, such as carious teeth, pyorrhœa alveolaris, gastro-intestinal fermentation, chronic appendicitis, etc. To arrest the further course of the disease and to bring about the subsidence of lesions which have not gone beyond the inflammatory stage is as much as we can hope to achieve, but this constitutes a remarkable achievement with which most patients will be content.

Subcutaneous Oxygen.

It is only during the last year or two that a tendency has become manifest to afford quasi-asphyxiated patients the full measure of benefit to be obtained from the inhalation of oxygen. Previously it was regarded, or at any rate treated, so to speak, as of the nature of a viaticum, a something to be administered as a matter of routine as soon as it became obvious that the angel of death was hovering over the patient. Even so its effects, if fugitive, were none the less remarkable, though many a humane physician must have inwardly doubted the wisdom of thus rashly calling back to temporary consciousness persons who were in any case lost to the world. Employed early, oxygen may well tide over the crisis by averting immediate oxygen starvation. Administered in the usual way with a funnel-shaped mask, or passed directly into the patient's mouth *via* a tube glass, none can tell how much is going into the lungs, so that the practitioner is working somewhat in the dark. Then, too, this method is extremely wasteful, because much of the oxygen escapes into the air. Much simpler and more practical is the recently introduced plan of injecting the gas under the skin of the abdominal wall. All that is necessary is to connect the tube of the oxygen bag with a hypodermic needle and squeeze the bag until a sufficient amount has been injected. Or, if greater accuracy be desired, the gas can be pumped in by utilising an ordinary rubber bulb syringe of the Higgenson type, the capacity of which is easily estimated. From 200 to 400 c.c. may be injected at a time, and as its absorption is very gradual the effect is maintained, which can never be the case when inhalation is practised.

"Here's a Skull, Now."

SOME bits of cranium and a mandible. That is the Piltdown skull. And it is causing quite a lot of trouble. When it was dug up in Sussex a few months ago, it was hailed with unmixed joy by the comparative anatomists. Now it is literally a bone of contention. It is agreed that it is an old skull belonging either to the Late Pliocene or to the Early Pleistocene period. It is also agreed that the shape of the jaw makes it impossible for the original owner to have talked. The argument is about the size of the brain. Dr. Keith and Dr. Smith Woodward have each "reconstructed" the skull, and their results differ. Dr. Keith makes the brain as great as that of a modern man, and decides that it belonged to a human being whom he calls *Homo Piltdownensis*. Dr. Woodward has found the brain considerably smaller, and has classed it as that of a new *genus*, *Eoanthropus Dawsonii*. The Germans approve of neither reconstruction. So we have all the makings of quite a pretty argument. As befits so solemn a subject the discussion is being carried on at considerable length, and with commendable restraint. Of course, one of the greatest benefits that these discoveries confer on us is that they give us something new to talk about. So let us take sides and be savage while there is yet time, for to-morrow someone will dig up a new old skull and the Piltdown specimen will sink into oblivion as deep as the gravel whence he came.

The Treatment of Epithelioma.

THE fact that in its early stages epithelioma is a local affection has furnished the surgeon with inspiration and hopefulness in his tedious crusade against malignant disease generally. There are many methods of dealing with epithelioma surgically, among which that of free excision is probably the best. Unfortunately, it is not possible to use the knife in all situations and in the later stages of the disease when the deeper tissues are involved. Ravogli, an American surgeon, has introduced a new preparation for the destruction of the morbid growths. He uses a mixture of formalin, lysol and perchloride of iron: formalin as a parasiticide and disintegrator of the epithelial infiltrating cells, lysol as a solvent of the hypertrophic connective tissue elements, and perchloride as a styptic. The formula for the mixture, to be freshly prepared, is formaldehyde 2 parts, lysol 2 parts, ferric perchloride 1 part, applied with cotton swab. The surface of the epithelioma is first washed with green soap, treated with 5 per cent. solution of cocaine, curetted; and treated with the application for five minutes. Good results are claimed by the author for this mixture, which is cheap and effective.

A New Remedy for Alopecia Areata.

THE physiological correlation between function and growth and the interdependence of the well-being of the various organs upon each, possess a therapeutic value, the knowledge of which is often usefully applied. But occasionally, when the functional integrity of an organ is for some reason disturbed, surprising effects are produced, the cause of which is apt to be mistaken or overlooked. In this connection a somewhat remarkable instance was given by Dr. Whitfield at a meeting of the Dermatological Section of the International Medical Congress. In the course of a discussion upon the subject of alopecia areata, he stated that he had often found the disease to depend upon an error of refraction. As soon as the necessary correction with lenses had been made, the symptoms ceased and the hair began to grow again. For this and other reasons he had come to regard alopecia areata rather as a symptom than a disease. It is, of course, well known that to errors of refraction have been assigned a host of diverse diseases, from epilepsy downwards. Some years ago it was even claimed that a notorious murderer, who paid the usual penalty for his crime, owed his criminal degradation to uncorrected hypermetropic astigmatism. Dr. Whitfield's observations, nevertheless, are interesting as showing that an uncorrected error of refraction may have a far-reaching effect, even in the least expected direction. The puzzle, however, is how to explain the fact that an error of refraction uncorrected may affect the nutrition of the scalp as to arrest the growth of the hair.

The Colloids.

Though it is now many years since Bredig first called attention to the nature of colloid substances, it is only during the last few years that they have shown any tendency to emerge from obscurity and to take rank in therapeutics. Physically the colloid state is as curious as it is ill-understood. A colloid metal is really a metal which has been converted into an ultra-microscopic powder, suspended in a liquid of some sort. These particles are so minute as to be with difficulty perceived even by the aid of the most powerful instruments, all the more so as they are animated by very active Brownian movement. Now the physiological activity of a given metal depends upon its surface area, consequently a fluid containing innumerable billions of these particles, each with its electric charge, produces effects vastly greater than the same quantity of the metal in the form of a chemical compound. The animal organism is largely made up of colloid substances endowed with their own specific properties, and life is associated with the interaction of these colloids. Toxic bodies converted into colloids exert marked physiological effects, while the toxic action is reduced well nigh to vanishing point, because the actual quantity of the body present is comparatively small. There is probably a great future for this class of bodies, especially as they promise to render service in many morbid states toward which so far we have been without arms, septicæmia and other grave constitutional infections to wit.

Mash that Mosquito!

The United States, with its policy of *sanitas sanitatum, omnia sanitas*, has made the Isthmian Canal zone into something comparable to a health resort. The anti-anopheline campaign, based on drainage, oil and muslin, has worked wonders. Now there is a new way. The apparatus are a nigger, a "slapper" made of a six inch square of wire gauze on a stick, and a wide test-tube with a piece of cotton-wool soaked in chloroform in it. The "slapper" is used when the mosquito rests on the screen. For other situations this is the *modus operandi*. (*a*) "The collector having spied an anopheline, uncorks his vial and gently but rapidly places it over the insect. In a moment the chloroform fumes overcome the insect, and it drops into the tube." It sounds delightfully easy, but seems to us rather a waste of good chloroform. Besides, the sturdy mosquito might recover from the anæsthesia and escape. On the whole, we prefer the good old English way of taking the insect firmly by the back of the neck, placing its head accurately over the centre of a smooth brick, and hitting it smartly with a heavy hammer. This will be found to involve no expense beyond the occasional renewal of the brick, and to be quite as efficacious as the method described above.

The Growth of Medical Knowledge.

If any indication were wanted of the vast strides accomplished in medical knowledge during recent years, it is surely supplied by the enormous variety and number of the communications read and discussed at the seventeenth meeting of the International Medical Congress. These quatrennial international crystallisations of the advancement of the science and art of medicine are good for nations as well as for the individual—they stimulate enterprise in original research; they infuse a commonality of feeling among all those taking part in them, tending to make the matter of racial distinction one of insignificance; they become the means of valuable friendships being formed by the interchange of amenities, which otherwise would have been impossible. Contrasting the results of the Congress just held with that of the seventh Congress held in London in 1881, the advancement in all respects has been phenomenal. The increase in the number of sections alone is significant of the progress made. Moreover, the transactions of the 1881 Congress are contained in four volumes, while it has been stated that forty volumes will be required to contain the full report of the proceedings of the Congress just held. It may be, however, that this is an exaggeration, despite the official source from which it came. Nevertheless it prompts the reflection that if, as has been shown, the advance in medical knowledge in thirty years has extended to such dimensions, who can foretell the result of the next International Medical Congress which will be held in London? If in thirty years' time much medical knowledge has now become commonplace which in 1881 was unknown, how much are we now out of date, in comparison with that which the next thirty years will reveal? This is a conundrum which only those who succeed us will be able to determine. It will scarcely lie within the sphere of those to whom it has been possible to attend each of the two last congresses in London to supply the solution.

PERSONAL.

Mr. T. Milnes Bride, M.D.Vict., has been appointed Honorary Ophthalmic Surgeon to the Northern Hospital for Incurables, Manchester.

Dr. John Benjamin Hellier, M.D.Lond., has been appointed an Examiner in Midwifery and Diseases of Women to the Royal College of Physicians of Lon[illegible]

Mr. John Crew, M.R.C.S., L.S.A., of Higham Ferrers, Northants, formerly president of the South Midland Branch of the British Medical Association, who died on June 16th, aged 76, left estate of the gross value of £47,647, of which £44,017 is net personalty.

Sir Patrick Manson, K.C.M.G., F.R.S., M.D., was the recipient of a handsome portrait medallion in gold at the meeting of the Section of Tropical Medicine and Hygiene on August 11th, as a tribute of respect and esteem from all his fellow-workers and admirers in the domain of tropical medicine in France.

The Council of the Royal Institute of Public Health have appointed Professor Edward William Hope, Professor of Public Health in the University of Liverpool, Medical Officer of Health for the City and Port of Liverpool, and President of the Society of Medical Officers of Health, to be honorary secretary to the Institute.

(*a*) *American Journal of Public Health*, Vol. III, No. 2. "Mosquito Catching in Dwellings in the Prophylaxis of Malaria." By A. J. Ormiston, M.D.

CLINICAL LECTURE
ON
ENLARGEMENTS OF THE SPLEEN IN CHILDREN. (*a*)

By HUGH THURSFIELD, M.D.Oxon., F.R.C.P.Lond.,

Physician to the Metropolitan Hospital, Assistant Physician to the Hospital for Sick Children, Great Ormond Street, London, W.C.

The subject of my lecture this afternoon is that of enlargements of the spleen in children. Some years ago, when I was learning physiology, physiologists were much divided as to the functions of the spleen; and I believe that that is still the case. I looked up one or two of the more modern books, and on this subject they appear to be as much in the dark as ever. So one does not approach the pathology with any clear interpretation of the facts of physiology. But it seems clear from the clinical evidence, that whatever else the functions of the spleen may be, the organ is intimately concerned with the alterations in metabolism which occur in the case of infections. And it is probably fair to assume, clinically, that in the great majority of enlargements of this organ we have to do with infective processes. Some of the enlargements are clearly due to infection, others not so clearly, but with considerable probability.

I propose to make a few remarks about the anatomical diagnosis of enlargements of the spleen, and then to deal with the clinical classification. I need not remind you that the spleen occupies the left side of the body, under the cover of the ribs; but it may be worth while to recall that normally in a child the spleen occupies an area immediately beneath the 9th, 10th and 11th ribs, in the mid-axillary line, that the splenic dulness in the normal child can never be demonstrated higher than the 9th rib in the mid-axillary line, and that it lies in such a position that the 10th rib forms a midline through the long axis of the spleen. In the enlargements of this organ, usually there is not very much difficulty in making up one's mind that one is dealing with an enlargement of the spleen. The reason is that the organs generally are so easily felt in a child through the comparatively non-muscular abdominal wall, that you [illegible] that you can [illegible] the kidney by the fact of the different relation of the descending colon to the tumour; that this colon will lie inside in relation to an enlarged spleen, and outside or over an enlarged kidney. And that, no doubt, is, broadly speaking, true. I saw a case at a *post-mortem* examination the other day in which a tumour originating in the kidney had become attached to the posterior surface of the descending colon, and had carried that in front of it, so that the colon lay right across the front of the tumour, offering a definite band of resonance as against the dulness of the tumour. But it is not always so; I have seen kidney tumours growing with the colon entirely to the inner side. The point which I have found most useful is to remember that a kidney tumour rarely reaches the upper border of the 9th rib in the mid-axillary line; and if there is a definite dulness above that, it is probable one is dealing with an enlargement of the spleen. It is possible to conceive that the kidney tumour may push the spleen up, and so increase the dulness, but I do not think that is at all common. The second point in diagnosis is that a kidney tumour invariably goes much further back in the loin, and your fingers placed at the outer border of the quadratus lumborum muscle in the back can communicate with the hand placed in front of the tumour. Another difficulty is sometimes caused by scybala due to chronic constipation, as, for instance, in a case of Hirschsprung's disease. Two or three years ago I, in combination with many other people, diagnosed enlargement of the spleen for which we were unable to account, in a boy of about five years of age, who died suddenly, and was found to be the subject of congenital dilatation of the colon, with enormous masses of scybalous fæces in the descending colon, which we had mistaken for enlargement of spleen.

Particularly in adults, of course, the growths in the descending colon have to be taken into consideration. But in children these are very rare, and I have never seen in a child a tumour of the descending colon which could have been mistaken for enlargement of spleen; but twice I have made the mistake—and have seen it made by other people—of diagnosing an enlarged spleen as a case of tuberculous peritonitis, and *vice versa*. I remember one boy who had leukæmia, with a spleen nearly down to his iliac crest, and was seen by three people, of whom I was one, who with one consent diagnosed tuberculous peritonitis.

The clinical enlargements one may divide into the acute and the chronic infections. The acute infections in which the spleen is enlarged to any degree are not many, the chief being typhoid fever; but the number of children so affected is small. In most cases of typhoid fever in children you can feel the spleen one or two inches below the margin of the ribs, but in two per cent. or three per cent. of cases the spleen forms a much larger tumour, reaching to the level of the umbilicus, and well out towards the middle line. There does not seem to be any difference in prognosis in these cases which have such extra large spleens, nor do I know why the spleen should be so much larger in some cases than in others. In the only case of typhoid fever in a child in whom I have seen the spleen after death, there was great enlargement of it, but there was nothing to distinguish it from the ordinary typhoid spleen. Enlargements of the spleen in typhoid fever are, in my experience, always painless, and are thus opposed to enlargements associated with septicæmia and pyæmia. In this condition there may be a very big spleen, so that when you are called to the child the spleen may be down to the umbilicus, or even lower. Other infective fevers may result in the spleen being just below the ribs. It may be enlarged in even such mild diseases as German measles, or varicella, but one disease in which I have found no enlargement of the organ is rheumatic fever. Should you find it enlarged in a rheumatic condition I think you should suspect

---

(*a*) Delivered at the Polyclinic, London, March 3rd. 1913.

infective endocarditis, with infarcts in the spleen, possibly even splenic suppuration.

The chronic infections of the spleen are not a small class, and I find it difficult to decide on any grouping for them. At first I thought of classifying them as infective and non-infective, but that proved insufficient; then that I would make a class of enormous enlargements and comparatively slight enlargements; but here again there were cross-currents. Finally, I have taken one group to include the diseases called by the names leukæmia and pseudo-leukæmia, and the second a more or less mechanical group. And I have been driven to make a miscellaneous group, in which one has reason to suspect various causes are at work.

The leukæmic group includes both myelocytic leukæmia, and lymphocytic leukæmia, and that form known on the Continent as pseudo-leukæmia, but which in this country we call Hodgkin's disease. It also includes that very remarkable disease described twenty years ago by v. Jaksch under the name pseudo-leukæmia infantum. It is a cumbrous name, but the others which have been proposed for it express either too much or too little. It has been called the splenic anæmia of infants, but it is a misfortune to christen anything splenic anæmia which has characteristics so widely divorced from the splenic anæmia of adults. The name splenomegaly of infants does not tell you enough about it.

In this group the spleen is very large indeed; though in the leukæmias of the lymphocytic form, or what is better called acute leukæmia, the spleen may occasionally not be enlarged at all. But in more than half the cases of lymphocytic leukæmia which I investigated last year the spleen was considerably enlarged. The associated symptoms are purpuric hæmorrhages, bleeding from the gums or from the other mucous membranes, the rapid onset of pallor, and usually considerable fever. The prognosis is rapidly bad; the majority of these cases do not live three months. Myelocytic leukæmia is very much rarer as a disease in children; I have seen four such cases under twelve years of age, and I was only able to find eight others in the literature to which any attention can be paid, because you cannot consider that the differentiation of leukæmias was established until about 15 years ago. We can say that these enlargements are infective processes, but not infections by ordinary bacteria. For some time it was supposed that lymphocytic leukæmia might be a streptococcal infection of the bone marrow, a view supported by evidence which was forthcoming both during life and after death. But the difficulty felt was that if lymphocytic leukæmia was a bacterial infection, so was myelocytic leukæmia, and in the latter no bacterial infection has been demonstrated. Various writers have claimed to demonstrate protozoa intracellularly in these diseases. But none of those have won acceptance from those who are investigating the cause of this disease.

Pseudo-leukæmia infantum is not, so far as I know, seen in children of the well-to-do classes; it seems to be confined to the poorer members of the hospital class. Some of my colleagues believe it is more common in the Hebrew race, but I do not agree with that. You can recognise the subjects of the disease as soon as they enter the room. They have a transparent pallor, which is partly due to œdema of the subcutaneous tissue; it looks much like the œdema in an early stage of Bright's disease. The moment you put your hand on the abdomen you can feel the splenic tumour; it is always enlarged on the first visit to the level of the iliac crest; and generally reaches forward to the middle line, or even beyond it. These cases have, clinically, the biggest enlargement which one meets with in an infant. They were described long before v. Jaksch' time by the late Dr. Dickinson, who attributed the enlargement to lardaceous disease, on what grounds I do not know, for the paper in which he described this condition, which was an excellent clinical description, ending up with an account of the *post-mortem*, gave no evidence that the spleen was lardaceous. The blood changes are certainly different from anything you see in lardaceous disease. And if the child survives —and 60 per cent. of them do—the spleen returns absolutely to its normal size, so that three or four years later you cannot palpate the spleen at all.

Anæmia pseudo-leukæmica is rare, so is lymphadenoma, and that again, in my experience, is not bacterial in origin. Protozoa have been associated with it, but that view has not found acceptance. There is a reversion to the former view which ascribed it to a modification of a tuberculous infection. You may have tuberculous disease superadded to lymphadenoma, but there is a disease—lymphadenoma, Hodgkin's disease, or whatever you like to call it—distinct from tuberculous disease. The characteristics of the enlargement of the spleen you all know under the name of the "hardbake." It is an absolutely solid spleen, though rarely as large as the leukæmic spleen, and studded throughout with more or less transparent nodules of various sizes, of pearly whiteness, sometimes yellowish. Those are set in a deep purple background of the splenic pulp.

Are there any other diseases, not so fatal as this, which can be confused with this clinically? Yes, there are. First, there is syphilis. Two years ago, writing on the subject of congenital syphilis, I expressed the opinion that the spleen was enlarged in two different ways, or rather at two different times in congenital syphilis. No doubt it undergoes an enlargement during the acute stage of the disease, at which time the rashes and epiphysitis appear. During that time I believe the spleen can always be felt; sometimes it is a couple of inches below the iliac crest. After the age of three months, whatever the severity of the disease, I believe the spleen is not as a rule palpable. The second kind of splenic enlargement occurs in connection with the later manifestations of congenital syphilis, at 15 or 16 years of age, in which the spleen is very large indeed; sometimes it is gummatous, with definite caseating gummata in the organ; sometimes it is an amyloid spleen. There is a third group, recognisable by the aid of Wassermann's test. I have seen, in the last two years, four or five cases of children who, without any other sign of syphilis, have developed at the age of seven or eight, a very large spleen. They have not been ill, the enlargement has been found in the course of the ordinary examination; and in two of the cases there has been enlargement of various lymphatic glands. There were two boys recently in St. Bartholomew's Hospital, one of them æt. 6, who was quite well except that during the last six or eight weeks he had developed enlarged glands in the neck and the axilla, one being as large as an orange in the epitrochlear space. He was found to have a spleen extending halfway to the midline, halfway to the iliac crest, and hard. He was not leukæmic, and his blood was normal, neither had he lymphadenoma. Could he possibly be a case of tubercle? Every now and then one comes across a case of glandular tuberculosis in which, without other symptoms, the lymphatic glands in various parts of the body are enlarged, and there is considerable enlargement of spleen. I thought this child had tuberculous enlargement of the spleen. However, he gave a positive Wassermann. We excised the epitrochlear gland, and the microscopical appearances were absolutely characteristic of syphilis, *i.e.*, an enormous accumulation of plasma cells throughout the gland, and the absence of the histological appearances of either tubercle or lymphadenoma. The second boy, who came in a few weeks, showed the same symptoms except that the only enlarged glands were those in the axilla, and there was a rapid clearing up under mercurial inunctions. Looking back, I can recall other cases of the same clinical type, but some of them were tuberculous. If you regard an enlarged spleen as one which is palpable one inch below the costal margin, the enlargements due to tubercle are probably at least half as numerous again as all the rest together. It is seldom that tubercle causes any great enlargement of the spleen; but if it does it is due to caseation, and this causes it to resemble the "hard-bake spleen" of lymphadenoma. The differences to the naked eye are characteristic, because the tuberculous spleen has a lot of perisplenitis, the nodules are less transparent, and the nodules can often be felt during life and are usually painful. So if you have a child with chronic enlargement of spleen of such size as to occupy half the left side of the abdomen, or more, you can exclude leukæmia by looking at the blood, and you can exclude v. Jaksch' anæmia by the fact of the age, for that occurs below 2½ years of age; the leukæmias and lymphadenomas are not seen below that age. When you have excluded leukæmia, you are left to choose between lymphadenoma, tubercle and syphilis. If it is the first of these there will be no alteration in the blood, but there may be a collection of glands which are hard and firm, but which are more often discrete, soft, and quite painless. And, except for pressure of glands behind the sternum, lymphadenoma usually shows no other symptoms. But sometimes we see in these subjects febrile attacks. There is such a case at the Children's Hospital now. During the attack the temperature rises to, perhaps, 103°, and after remaining like that for a week or ten days, it slowly comes down again. There is a week's interval and then it rises again. In the case of syphilis, the histological structure of the gland will help you, and so will the Wassermann test. In the case of tubercle, the only help you will get will be from examination of the gland removed. If that is tuberculous, the presumption is that the spleen also is tuberculous. It is not impossible for these cases with large tuberculous spleens to recover completely. In France they have taken to removing such spleens, and some French surgeons have claimed it as the proper mode of treating these tuberculous spleens. Certainly some of their results are very good indeed.

With regard to rickets, rickets, *per se*, is not a cause of enlargement of the spleen. If in a child suffering from rickets you find obvious enlargement of the spleen, you must look for some other cause. One reason the spleen is more palpable in rickety than in normal children is the confined space of the thorax due to the pigeon-breast or to the sinking-in of Harrison's sulcus, which leads to a splaying-out of the lower ribs, so that the arch of the diaphragm on either side is flattened out, and liver and spleen lie lower in the abdomen. Then there are the group of enlarged spleens associated with disease of the liver. Banti has described a condition in which there is a very chronic disease lasting five to twenty-five years, associated with enlargement of the spleen and eventually with cirrhosis of the liver. He described three stages: anæmia, cirrhosis of the liver, ascites; and I think he has demonstrated that in the particular type of disease which he has tried to distinguish, removal of the spleen at an early stage puts an end to the process. But such cases are extraordinarily difficult to differentiate from cases of enlargement of the spleen due to mechanical causes. When an adult has ordinary portal cirrhosis, in a large number of cases the spleen is definitely enlarged, and forms a large abdominal tumour. I know no means of differentiating such cases from Banti's disease; but if in such cases you attempt removal of the spleen, you merely hasten the patient's end.

These cases of liver disease with enlargement of the spleen include many which we do not understand. Recently much has been written about acholuric family jaundice. That term means that the patient appears jaundiced, but passes no bile pigment in his urine, and never has clay-coloured stools. Often it occurs in more than one member of the family, and is usually congenital. The spleen has been found to be enlarged in about 80 per cent. of the cases recorded. In a boy of nine years under my care who was suffering from this disease, the spleen was removed by my colleague, Mr. Tyrell Gray, and at the operation the spleen weighed 49 ozs. The meaning of the splenic enlargement in acholuric jaundice is quite obscure. Some have thought it is enlarged because of the active destruction of red blood corpuscles, referring to the spleen in the physiologist's old phrase as "the grave-yard of the red corpuscles." That does not seem to me to be an adequate explanation. In pernicious anæmia, for example, where there is a greater destruction of red corpuscles there is seldom such a degree of splenic enlargement.

There is another disease, polycythæmia with splenomegaly, which also is very curious. Apparently the spleen enlarges primarily, and secondarily to that there is an enormous increase in the number of red corpuscles circulating in the peripheral blood. Up to the present, no child has been described as suffering from that disease, though it is known to be a congenital disorder; the adults suffering from it always telling you they have had the disease all their lives. It cannot be long before cases in children are put on record.

Lastly, there are the splenic tumours. With the exception of gummata and hydatids a tumour of the spleen is a rarity, and in children practically unknown. I have never seen a secondary malignant growth in the spleen of a child. Primary malignant growths of the spleen of a child have been described, but are very rare. Then there is the entirely secondary condition which can never be mistaken by anybody who has once seen it, and that is the advanced stage of lardaceous disease. There is a curious satiny appearance of the skin associated with nephritis, and an enormously hard liver and spleen, upon which you can make no impression, even by heavy pressure. It is quite painless, and is associated with either chronic tuberculosis or a chronic suppurative lesion.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by A. F. Tredgold, L.R.C.P. Lond., M.R.C.S.Eng., Consulting Physician to the National Association for the Feeble-Minded, etc., etc. Subject: "Acquired Mental Defect."*

Dr. Agnes McLaren, one of the pioneers of the medical education of women, half-sister of Lord Aberconway, left £4,184.

ORIGINAL PAPERS.

APEX-TREATMENT
FOR
PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.CANTAB., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

(Continued from p. 169.)

VI.

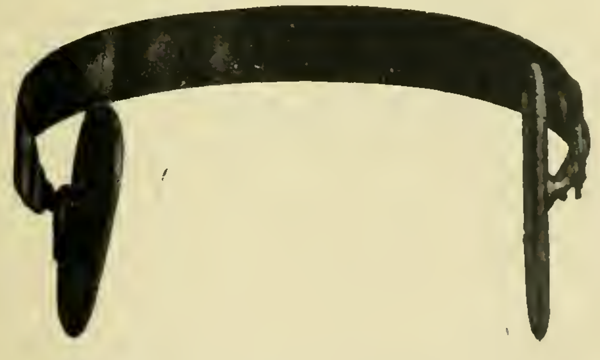
DIFFERENTIAL APEX-TREATMENT AND UNILATERAL BREATHING. CARSON'S METHOD.

Curative Pneumothorax, the great artificial mechanical cure which was to mend some of the late failures of our bacillo-therapy, was sketched in 1882 by Forlanini, (*a*) from nature's spontaneous cure, a few months after the discovery of the bacillus by Baumgarten and by Koch; but it was not carried out by him until 1892, soon after the initial disasters of tuberculin. Both were heroic and fearful experiments; and yet they have been justified by their eventual adoption in our current practice. We are now endeavouring to reason out the means of obviating the necessity for all heroic remedies, including Macewen's pneumectomy and Wilms's retro-thoracic costal mobilisation, besides other forms of mechanical operative treatment, by a simple clinical enquiry, free from serious experimental dangers, into the relative curative merits of apex-inflation and of apex-deflation, of apical rest and of apical exercise, or in mechanical terms, of localised apex-compression, and of unilateral apex-expansion. The "chest-clip," which is merely a convenient appliance in the service of that enquiry, was originally thought out, upwards of three years ago, as an instalment of "differential" apex-treatment, to give to the stricken apex the rest which I then believed, and which is still generally assumed, to be its due; whilst securing for the patient his main curative asset, of which he continues to be partly deprived by over-resting his healthy pulmonary and cardiac functions.

It is striking that curative pneumothorax should have been "invented," and should have been prophesied as "the cure for the disease deemed incurable," before ever it was copied from nature. I must, however, leave that point open for further literary investigation, not having obtained a complete perusal of the writings of James Carson, of Liverpool. It is none the less certain, although this had been forgotten, that *Carson's method* is in the fullest sense his own, and that it was evolved in 1821 from a patient experimental research into the physiology of pulmonary elasticity (*b*). It was first carried out in 1885 by Wm. Cayley, of the Middlesex Hospital, (*c*) at the hands of the late Mr. Hulke, with complete success as regards the arrest of an uncontrollable hæmoptysis from pulmonary aneurysm, though the patient soon after succumbed to his acute miliary tuberculosis. This country took no further part in its elaboration, which was largely contributed by Murphy, of Chicago.

Turning from the historical to the practical argument, we shall find in an analysis of Carson's method its shortest exposition. That treatment is essentially *complete*, as it includes the bacillary cure, although that cure is effected entirely by non-bacillary measures, namely, by purely mechanical forces. Not less complete, too, in that it treats not only the diseased lung, but also the healthy. It is essentially *thorough* in its wholesale dealings. It is essentially *bilateral* and at the same time essentially *unilateral*, for it gives to both sides their separate treatment. It is therefore essentially *differential*, which is the fundamental requirement. Lastly, it is essentially, on both sides, a *local apex-treatment*. Its great faults are that it is heroic in its initial and in its subsequent "one-lung" dangers; and that it is radically unphysiological in its date, *principiis obsta*; as well as in its sacrificing wholesale the pulmonary agent of recovery to the cardiac. It eases the heart of its poison, and strengthens both right and left heart by increased mechanical work—at the cost of abolishing roughly one-third of the respiratory function, and committing life to the hazards of a single lung. We mention its faults merely that they may be avoided. But we must dwell upon its teachings, as a pattern to emulate if we cannot equal it.

Pulmonary Compression and Unilateral Breathing.—No treatment of consumption can be *thorough* which does not aim at that bilateral completeness, at that unilateral differentiation, and at that localising apex-treatment. Likewise no mechanical prevention is as thorough as it might be, if it should neglect the improved means which pneumothorax now suggested. Their mechanism is simple; it rests upon two great factors: (1) Absolute pulmonary compression; and (2) exclusively unilateral breathing.



The Adjustable Chest-clip, showing the Ball-and-socket attachment of the heart-shaped front pad, and the sliding attachment of the spring.

Indirect Thoracic versus Direct Pulmonary Compression.—At the early time we need no heroic measures; neither the solid apex compression nor the absolute physiological apex-rest which are the monopoly of intra-pleural compression; and least of all the "absolute" unilateral breathing. It is enough of rest for the restful apex if we should restrain its extra excursions by steadying the upper ribs. Piorry, (*a*) I only two months ago discovered, was the first to localise, thanks to his ill-honoured accuracy in physical examination, the mechanical treatment to the lesion. He aimed by his "local" flattening thoracic pressures (up to 14 lbs. over a vomica) at an effective pulmonary compression; and he did realise some of our remarkable results of to-day and has recorded some gratifying temporary recuperations. Our own Stuart Tidey

---

(*a*) Gazz. degli Ospitali, Agosto-Nov., 1882.
(*b*) Essays Physiological and Practical. Liverpool, 1822.
(*c*) Clin. Soc. Trans., May 8, 1885.

(*a*) Traite de Medicine. 1833.

of Montreux (*a*) followed him long after with a method of continuous "general" lung rest and support by strapping down the entire side affected "in the attitude of expiration." He may excuse our attributing his good results to an unintended exercising of the diseased apex, which is thus made to breathe the more unless the clavicular freedom of brachial movement were to be suppressed by a rigid shoulder casing. He has carried out for us with conclusive results our experiment of early curative apex-inflation; imitating on a small scale and in one and the same lung both the pulmonary compression of pneumothorax and its opposite unilateral apex-breathing.

The chest-clip proposes to carry this out, *gradatim and intermittently* by the indirect method of induced unilateral apex-activity, which is our policy of prevention, and which may prove to be also that for earliest cure.

Relative Unilateral Breathing, more correctly perhaps "unilateral over-breathing," is part of our life, the unnoticed perpetual servant of our versatile muscular activities and of our varied recumbencies. And yet it is hardly known by any of us except perhaps by some physiologists, to be one of our "volitional" attributes and not merely an unconscious one. The chest-clip reveals this at once to the least perceptive. We can struggle to breathe "unilaterally" without it; but it is singularly convenient and safe as it is automatic and there is no struggle likely to set up any risk.

Lateral Decubitus.—The familiar question, "Does it matter which side we sleep on?" is not irrelevant. Lateral decubitus is usually discussed in terms of the heart, the stomach, or the liver rather than of the apex. As the circumstances which govern our preference are usually permanent, be it the "wall," the "light," or any other, that preferred decubitus may occupy one-third of our daily life. For the robust this may have little significance. But in predisposed adolescence it cannot be immaterial to invariably restrain for eight consecutive hours the aeration of one and the same apex always. I have not been able to think of any more plausible solution than this for our two ætiological mysteries: in the individual, the unilateral incidence of apex disease, and in the race, the bilateral evenness of that unilateral incidence. It might also fit in, in view of the frequency of a leftward mobility of the heart in association with a sensitive apex beat, with the statement of some statisticians that the right apex is rather more frequently the first to suffer.

For late treatment there can be no rule. But *for prevention* the indication is clear to cultivate the habit of *alternation* in the young. That is also the principle of our diurnal active respiratory apex-culture. The "general" symmetrical respiratory methods are good, some of them appealing more specially to the apices. Our method is "local," definitely apical, but unilateral. It handles each apex separately, and with much more searching effect. Above all, it leaves us in no doubt whether the predisposed apex may not, after all, have remained unexercised. It is not only the safer, but the more thorough method as we may now explain.

Unilateral Breathing in Spinal Culture and in Apex-orthopædics.—Whilst using the chest-clip it soon appeared that it was also available, and that even independently of it unilateral breathing was also available, as an important therapeutic agent for the treatment of the spine, quite apart from any pulmonary disease. I am treating on these lines with most encouraging results a patient with extreme functional cervico-dorsal scoliosis, who had originally come under my treatment six years ago for his resulting paraplegia, from which he gradually and completely recovered under a special method of spinal extension. His present course of treatment, by unilateral breathing, has for its object to lessen the remaining curvature and vertebral rotation. The direct evidence which I have thus obtained of the mobilising and curative effect of unilateral breathing upon the distorted spine has further led me to realise that the same mechanical effect can be utilised prophylactically in the phthinoid chest for mobilising bilaterally the upper dorsal spine by an alternating right and left treatment, and also for increasing the range of the upper vertebro-costal articulations. This shows that the preventive treatment of the phthinoid chest, aimed at by Freund, need not be of an operative nature, but may be worked at, with special success in the plastic stage of youth, as an orthopædic, and at bottom, a spinal question.

For Treatment.—As this is a double-edged weapon, the art of its safe and successful use will have to be studied clinically. It is obvious that the scope both of efficiency and of safety will be greatest at stages which least depart from the pretubercular apex conditions. It is also clear that, whilst the strain of breathing unilaterally by a voluntary and forcible effort might be detrimental, for instance, in the early open stage, the same patient might derive considerable apex benefits without any serious risk, from the gentle and smooth expansion induced by the application to the sound side of a *minimal pressure in recumbency*. As "open air" is regarded as the chief curative agency, it is not unreasonable to expect it to be beneficial if it could be brought with safety to the actual seat of the disease; and this seems to be fairly safe both in the closed stage and in the earliest open stage. But that main question, I repeat, must remain *sub judice* for searching clinical investigation.

(*a*) "On Mechanical Support of the Lung in Phthisis"; *Brit. Med. Jour.*, 1896; also Cong. Tuberc., Paris, 1905.

THE MODIFICATION OF COW'S MILK FOR INFANT FEEDING.

By D. M. BARCROFT, M.D., Ch.B.Edin.,
Physician, Margaret Street Hospital for Consumption, London; and Clinical Assistant, Mount Vernon Hospital; late Resident Physician, Royal Hospital for Sick Children, Edinburgh.

THE view is sometimes expressed that all the work devoted to the modification of cow's milk for infant feeding is labour lost. It is urged that cow's milk, pure and undiluted or unmodified, is quite appropriate for the human infant and is capable of being digested. This view is upheld in a recent paper by Dr. Cameron (*British Medical Journal*, April 26th, 1913). It is, of course, not new, and has been before the profession since Professor Budin, of Paris, advocated it some years ago. The verdict of general experience is, however, against it, and in the majority of instances, whole milk proves unsuitable, even for normal infants. It therefore seems necessary to insist once again that in general practice it is the casein of the cow's milk which produces the difficulty in digestion, and the cases which are adduced to the contrary show that many infants possess a reserve of digestive energy which allow it to be overtaxed with impunity.

My own experience has been that the successful treatment of infantile indigestion demands a most careful modification of the casein content of the milk. After a trial of several methods, I am convinced that its physiological modification by means of lactalbumin is the most certain of all. The method is the only physiological one because it has been shown that the digestibility of the casein of human milk is due to the influence exerted on it by the large amount of lactalbumin it contains. This accounts for the softness and flocculence of the casein curds yielded by cow's milk to which lactalbumin is added.

I have had the opportunity of using lactalbumin in the form of Albulactin pretty extensively at the Bunhill Medical Mission, and I find that, in cases of indigestion and malnutrition of babies fed on cow's milk, its addition to the feeds causes them to be well digested, instead of being rejected almost as a foreign body. In this way, a number of infants who were losing weight or were stationary in weight and were not thriving, have made remarkable and rapid progress, so that in a few weeks their weight rose to normal, and in a few months they presented the appearance of healthy, well-nourished children.

One typical case may be quoted here. It concerned an infant aged 5 months, who had been breast-fed, but was suffering from constipation and extreme malnutrition, only weighing 6 lbs. when it came under treatment—*i.e.*, less than the average weight at birth. It was quite evident that this was one of the cases wherein the mother's milk was not supplying adequate nourishment. The infant was therefore weaned and was given a mixture of Albulactin and condensed milk. This agreed perfectly, and the child's weight steadily increased. It put on 16 ozs. in 14 days, from March 27th to April 10th. The next fortnight saw another increase of 10 ozs. On June 19th, the weight was 9 lbs. 2 ozs., and on July 3rd, 10 lbs.; the appearance of the child was healthy, and steady progress was being made, despite the severe handicap put upon the treatment by the wasted and emaciated state of the patient and the failure of its assimilative powers when it came under our care.

Incidentally, I may emphasise the fact that, in cases of summer diarrhœa, I find Albulactin and water a very much simpler form of nourishment to place in the hands of the mothers, than asking them to make albumin water.

The merits of Albulactin, from the clinical point of view, appear to be:—(1) Its reliability in cases of malnutrition due to digestive defect; (2) The simplicity of its preparation, which can be safely put in the hands of uneducated people.

The proportion of cases in which no benefit is derived from this treatment seems small, so that one might say its applicability is all but universal in this class of cases, and I may certainly say I have tided a good many infants over a period during which, it is doubtful if, treated otherwise, they could have been kept alive.

RE-ALIGNMENTS IN GREATER MEDICINE. (*a*)

By HARVEY CUSHING, M.D., F.R.C.S.Eng. (Hon. Causa),

Professor of Surgery, Harvard University.

Mr. President, Ladies, and Gentlemen,—Thirty-two years have elapsed—a full generation—since this Congress, under the distinguished leadership of Sir James Paget, last gathered in London. Among the participants on that occasion were five of the immortals in the history of the medical sciences: Huxley—naval surgeon, zoologist, palæontologist, educator, philosopher, public servant; Virchow—pathologist, anthropologist, archæologist, statesman and sanitarian; Pasteur, the chemist; Lister, the surgeon; and Koch, the bacteriologist—among the foremost contributors of all time to the welfare of their kind. On the foundations which these men laid—a new conception of biology and man's place in nature; the doctrine of cellular pathology; fermentation and immunity; wound healing without suppuration; bacterial diseases—a transformed medical edifice has been erected. Methods of investigation, the direct outcome of those which they evolved, we will still employ; weapons which they devised are still, and always will be, effective, not only in a hand-to-hand conflict with individual examples of many of the disorders to which man and the animals needful to his existence are exposed, but better still in their prevention.

It has been a seeming paradox that the medical profession has so consistently endeavoured to make of the world a place where there is a constantly lessening need for the medical man. He is, indeed, already feeling the effect of these efforts, and as he becomes more and more a servant of the public health, and less and less a prescriber for individual ills, he philosophically accepts and humanely welcomes this outcome of medical discoveries which the experimental method has already given and will increasingly continue to give. Disorders which gave bread and butter to our predecessors are disappearing, as small-pox disappeared after Jenner. One injection robs diphtheria of its terrors, another, meningitis. Typhoid fever, which once replenished the doctor's autumnal pocket-book, is now looked upon as a civic disgrace, and where it exists or is likely to break out protective vaccination is performed against it. Tuberculosis is everywhere fast coming under State care, and the widespread campaign against the disease, in which those outside the profession are taking no insignificant part, is gradually lessening its ravages. The health of children attending the public schools is supervised by appointed officers; district nurses and the social service worker visit the homes of the sick and assume duties which the hospital physician long neglected; a privately endowed commission takes steps to eradicate hook-worm infection from a whole zone of the globe; an organised Red Cross Society, with Government affiliation, steps in in great emergencies; Governments see fit to pass insurance Acts which make public officials of the profession at one sweep. Dr. Pound, of Cure Lane, is being superseded by his young disciple, Dr. Ounce, of Prevention Street.

THE VALUE OF ANIMAL EXPERIMENTATION.

In the search for biological truths the God-given privilege of becoming obvious benefactors to their species comes to but few men. No one of the countless inquisitors of nature knows whether the mantle of recognition will fall upon him—or, for the matter of that, especially cares, provided he be given the personal satisfaction of having taken a step forward in knowledge, no matter how trifling at the moment that step may appear to be.

To whom is chiefly due the expectancy of recovery for the consumptive? Is it to Leuwenhoek and the microscope; to the father of Lister and to Abbé, who perfected its lenses; to René Laennec and his stethoscope; to Sir William Perkin, whose experiments with the coal-tar by-products furnished the necessary colour reagents; to Villemin, who demonstrated the communicability of the disease; to Koch, whose genius made possible the recognition and cultivation of the organism; or to Ernest von Leyden's propaganda in Germany and the United States; to Trudeau, himself a victim of the disease, through whose precepts and example tuberculosis has been moved into the open, where it is being effectively attacked in a campaign of education shared by laymen, Legislature and physician alike? Unquestionably, through experimentation on animals the most important step in this progress

---

(*a*) Abstract of the Address in Surgery delivered before the Seventeenth International Congress of Medicine, London, 1913.

was made—the discovery of Bacillus tuberculosis and its identification as the causal agent not only in pulmonary consumption but in many "strumous" and "scrofulous" disorders which puzzled our forebears.

Where will lie the chief credit for the approaching victory over the great social scourge, which, since its outbreak in Columbian times, has undermined the vigour of the race? Will it be with those earlier men who gave us the tools of research—the microscope, the culture media, and the colouring dyes; with Schaudinn, who discovered the spirochæte; with Wassermann and the possibility of a chemical diagnosis; with Metchnikoff, who successfully transferred syphilis to the ape; or with Ehrlich, who, by his original methods has had the triumph of synthetising a drug possessing a special affinity for the infecting organism but leaving uninjured the tissues of the infected host? There has been nothing heretofore comparable to this relentless, persistent, certain elaboration of a chemical compound which at a single dose may destroy within the living tissues the organism of a dread disease. Before it all past discoveries of therapeutic agents must make obeisance—even Jenner and vaccinia, Pasteur and the attenuated virus, Kitasato, Behring and the elaboration of the antitoxins.

To whom is due the approaching transformation of the tropics into a possible habitat for civilised man? Again, a series of investigators on investigators' shoulders, until Theobald Smith, in the case of the tick-infected cattle decimated by bovine malaria (Texas fever), in 1893, showed for the first time that a parasite might be an essential intermediary host in the transfer of a disease from animal to animal. Promptly all blood-sucking parasites of man became objects of suspicion, and ere long convictions followed—first in the case of filaria by Manson, then Ross's demonstration that the mosquito is also an essential link in the cycle of "million murdering" malaria—a discovery which was made possible through his studies of infected birds. But when it became necessary to establish unequivocal proof in the case of man, the younger Manson, and Warren, of the London School of Tropical Medicine, did not hesitate to submit themselves to the bite of infected mosquitos sent for the purpose to England from the Roman Campagna. It is hardly possible for one unfamiliar with the experimental method and its necessary tedious controls to conceive of the patient, unflagging, time-consuming labours on the part of many investigators the world over, often conducted in most unhealthy districts and in the very shadow of death, which step by step were required to lead to this final demonstration—labours which in review seem almost beyond the possibility of accomplishment. The discovery of the malarial plasmodium of the blood, the determination of its several varieties, the study of the sexual cycle of its development, the observation of the changes in the stomach wall of the mosquito and the final lodgement of the sporozoites in the glands of the proboscis, the recognition of the particular species among the many genera of mosquitos concerned, the establishment of the fact that the female alone is the active agent, the finding of the length of time necessary for infectivity—each step, whether made by Frenchman, by Italian, by Canadian, by Englishman, or by German, was a triumph of the spirit of research, and no great objection is raised if, in the process, the mosquito, bird, and man are the subjects of experimentation.

Large sums of money have been wisely devoted to the prevention of cruelty to animals, and much good has been done in the past, but by a strange process of evolution most of those now entrusted with these funds, instead of grasping the opportunity to advance knowledge of the diseases of animals, have devoted their energies to opposing such advance as may be undertaken for the sake of man at some expense to animal life. The future offers a great opportunity for these societies, whose capital is now largely expended, on the one hand, in the wholesale sacrifice of stray and diseased animals, and on the other in destructive criticism of the methods of those they call vivisectionists; for by constructive investigation and by the employment of the same methods which have been elaborated by those whose primary object is the study of the diseases of man, they may become as great benefactors to animals, and incidentally to man, as the medical scientists have been to man and incidentally to animals. There could be no better outlet for the present wasteful methods of many of these organisations than the establishment of veterinary hospitals in which modern methods of treating disease could be employed, further investigations made, and students of veterinary medicine taught—the three great functions of any hospital; and there is promise in some communities that this wise step may be taken.

The Relations of Medicine and Surgery.

Billroth said some thirty years ago, "Die innere Medicin müsse mehr chirurgisch werden," and this seems to be what is taking place. Before Billroth's time it was largely internal medicine versus external surgery, for operative measures were necessarily confined to the exposed parts of the body; the visceral surgery of to-day—the larger part of the present surgeon's work, in the inauguration of which Billroth himself played no inconspicuous part—was then inconceivable. We still retain many of the traditions of those earlier days, days when a pure craftsman, steeled to act in the face of unanæsthetised suffering, amputated, removed surface tumours, ligated vessels, cut for stone, and treated fistula and a few other ills with an unerring hand and unbelievable speed. The high-road to surgery was through the anatomical dissecting room, and in these surroundings the operations of surgery were then, and are still, largely taught, with the result that the rule-of-thumb operations of one generation are handed on to the next, who will never use them, owing to the extraordinary progress ever making in these measures due to methods of asepsis and the increasing knowledge of surgical possibilities. To-day an individual of wholly different temper from the surgeon of old ventures to do operative work, and the essentials for his training are of an entirely different order. Descriptive anatomy, useful as it may be to him, is no longer a prime requisite in the terms of the past generation, but his knowledge of visceral physiology and pathology must be broad, his observations of asepsis unimpeachable, his skill in hæmostasis and handling of the various tissues delicate and painstaking. As a training ground the anatomical dissecting room fast gives way to the experimental laboratory. In the breaking up of greater medicine into its clinical specialities, the primary cleavage gave us physician and surgeon, with medicinal versus manipulative forms of treatment as their essential distinctions. Chiefly on anatomical lines each of these major subjects has broken up into a second or even a third order, but in the case of these further subdivisions it is to be noted that there is an inevitable tendency for operative therapy to become attached thereto, so that we have the ophthalmic or aural or laryngological surgeon, the gynæcological, orthopædic, genito-urinary, or neurological surgeon, according to the direction whither opportunity or training or inclination may have led. Even the obstetrician—the half-brother of the physician and surgeon—reaches out for the operative side of the diseases of women, with the complete Frauenklinik in mind. And what is happening in these specialities is an indication of the tendency in the two major branches; for internal medicine and surgery, as the treatment of disease grows less empirical, unquestionably tend to converge.

Modern Science and Experimental Methods.

"Surgical instinct" and the "educated touch" have been overworked shibboleths which have stood in the way of many innovations, particularly those which concerned the introduction into practice of instruments of precision. As told in rhyme by Oliver Wendell Holmes, fun was poked at Laennec and his new-fangled toy, the stethoscope. Probably Floyer heard a protest against the "pulse watch" and Wunderlich against the thermometer; only yesterday it was raised against the instrumental measurement of blood-pressure. Had not the hand been industriously trained to estimate the degree of fever by contact with the patient's brow, and the fingers the quality of the pulse at his wrist? Even the Roentgen ray brought misgivings to those skilled in the elicitation of crepitus from fractured bones. The tendency to disparage the so-called accuracy of "scientific" attitude in medicine and to make much of the "practical" doctor or surgeon who is superior to the microscope and other laboratory accessories is rapidly passing. As I have said, the application of surgical principles, whether in laboratory or clinic, is constantly becoming more general. The slipper of surgery has been found to fit that Cinderella of medicine, experimental pathology, whose coach now has devoted outriders representing all departments. In consequence of this lessened departmental insularity, all react far more quickly than heretofore to a ray of light disclosing some new aspect of disease, just as they do to some novel method of study which reopens a door long closed against profitable investigation. The glands of internal secretion and their inter-relations, brought to the fore primarily through the clinic; the principle of intravital staining, with all its promising ramifications, introduced by the experimental therapeutist; the studies of cellular physiology which refined methods of tissue-staining promise to make so fruitful; and the growth of tissues in vitro by the experimental anatomist; these occur as immediate illustrations. To-day the clinical acumen of the practitioner, experienced though he may be, has given way to a chemical test by a laboratory expert, and only when the disease is thus proved to exist is a diagnosis accepted. The discovery of the spirochæte and the study of its biological habits have taught us that in certain parts of the body, especially the central nervous system, the organism is not accessible to the former methods of treatment, or, indeed, if reached, that it may have acquired an immunity and resistance toward the very drugs supposed to destroy it.

Let is suppose that the malady has taken the form of a cerebral gumma. The patient has headaches, and there is a suspicious clinical history. What is required? A lumbar puncture, a cytological study of the fluid, and the Wassermann test requiring one specialist; an ophthalmological and perimetric examination needing another; a neurologist certainly, for a careful study is necessary to determine if possible the situation of the lesion; probably, too, a Roentgenologist; and in the end, perhaps, another to administer salvarsan; or, in the case of a non-absorbable fibrosyphiloma, as likely as not an operation will finally be needed. And this for what was yesterday a simple problem, easily faced by the practitioner single-handed! Thus, scientifically accurate diagnostic measures and a new form of therapy requiring blood-letting and manipulative skill make a craftsman even of the syphilographer. This is a far cry from a written prescription, a bottle, and spoon.

No, the practitioner cannot be chemist, neurologist, bacteriologist, ophthalmologist, radiographer, surgeon, and what-not rolled into one, and do effective work. The Jonathan Hutchinsons of the profession are, alas, rare.

These, then, are some of the transformations and realignments which are taking place in medicine, and which, directly or indirectly, have come through the great contributions made a generation ago by those with whose names this address was introduced; the public is not only awake to the great developments in medicine which animal experimentation has made possible, but ready to participate in their application for the general welfare; the physician at large, the valued family adviser, is reaching out toward the important problems of hygiene and preventive medicine, while the individual patient, as the complexities of disease unravel, needing more and more specialised and more and more surgicalised treatment, is gravitating toward the modern hospital; the departments of the preclinical medical sciences, which formerly existed in splendid isolation, find their fences down, owing to the levelling influence of experimental pathology; hospital organisations are undergoing changes which will ultimately require the full time and continuous activity of those who serve them for the benefit alike of student, of science, and of patient. The kaleidoscope of medicine is turning; these are merely some of the present rearrangements of the images as I see them—new patterns from original fragments—for "Is there anything whereof it may be said: See, this is new? It hath been already of old time, which was before us."

RECENT WORK UPON HYSTERIA. (a)

By TOM A. WILLIAMS, M.B., C.M.Edin.,
Washington D.C., Memb. Corresp. Soc. de Neurol. de Paris, and Memb. Corresp. Soc. de Psychol. de Paris, Memb. Assoc. de la Soc. de Med. Ment. Clin.; Neurologist to the Epiphany Dispensary, etc.

Whether hysteria is determined, as Breur (1) thinks, by the occurrence of peculiar dream-like conscious states with a narrowed association capacity, and whether these are purely due to psychically painful experiences as argued by Freud (2); or whether, following Janet (3), hysteria is to be summed up as a weakness of the power of associating impressions; or whether it is an actual splitting of consciousness which more or less divides its victim into the exaggeration of manysidedness, known as multiple personality (Sidis) (4); or whether, with Sollier (5), we conceive hysteria as an inopportune sleep or numbness of a part of the cerebrum; all clinicians agree with Babinski (6) that the most conspicuous and invariable characteristic of a hysterical is *suggestibility*.

As nothing is more detrimental to the progress of science than to call by the same name phenomena which differ in essence, it would be eminently desirable that students of the psycho-neuroses should adopt some least-common-measure for the study of each group; and as it seems quite evident that there is a group of very various symptoms, each of which is "susceptible of being produced by suggestion and removed by suggestion persuasion" (7), it is strongly to be desired that differences should be sunk for the time being in order that, by use of a common, unique and unequivocal, and above all ætiological, character we may collect examples by the correlation of which we may hope to penetrate more deeply into the origin of *pithiatism* (8) in general.

That Babinski has fallen back upon a teleological definition (9) of suggestion is to be deplored; for the sense in which he uses the word, that of an insinuation, that is, something evil, is entirely subversive of the essential psychological mechanism that is connoted by it, and so long ago made clear by Bernheim (10). For the essence of implantation of ideas by suggestion is not their evil nature, but the manner of their reception, viz., without full awareness of how they have gained entrance to the mind.

Elsewhere (11) I have tried to develop the difference between this process and that which may be called persuasion, in which the subject takes full cognisance of the manner in which his belief is caused to alter. A man persuaded knows *why he knows*: a person suggestioned *merely knows*. It is the method in which knowledge is acquired by children, savages, many of the uninstructed and the credulous in general. A few examples will make clear the manner in which symptoms are acquired by suggestions in some common types of hysteria.

(See also "Ten Cases of Hysteria Successfully Treated without Minute Psychoanalysis" (*Post-graduate June Medical Annals.* Wash., January, 1912), many of which illustrate the mechanism.)

Case of Hysterical Hemiplegia.—A young married woman, whose appendages had been removed some years before, at which time she had right hemiplegia believed to be syphilitic, was seen with Dr. Thos. Claytor. She had completely recovered until a few days before I saw her.

There was complete anæsthesia and flaccid paralysis of the right side. There was no hemianopsia, ataxia, or tremor, which excluded a thalamic lesion.

(a) Read to the Neurological Section, A.M.A., June, 1912, at Atlantic City. *J.A.M.A.*, Dec. 21, 1912.

The patient could be made to sit up, during which act the abdominal and pelvic muscles contracted coordinately, which they could not have done in so complete an organic paralysis. The tendon jerks were not exaggerated, the abdominal reflex was not diminished, and the great toe did not extend when the sole was stroked. There was no hypotonia, and both platysmæ contracted on forcible depression of the chin. Synergic dissociated movements were absent, and there was no complication of facial, ocular nor articulatory muscles. When palsied arm or leg were suddenly let go, there were contractions of the antagonistic muscles.

The syndrome had occurred after a contrariety, and was quickly removed by the suggestion of gradually re-educating the movements. Four days later the patient shook hands and could walk, in accordance with my expressed expectation; and the patient was then fully apprised of the fact that her paralysis had arisen merely from the idea that she could neither feel nor move the right side. The discussion is too long to detail here (34).

Case II.—*Hysterical Obsession and Phobia.*—After an attack of influenza, a woman returning in a crowded car from a shopping expedition, began to feel much oppressed and in want of air. The heart, enfeebled by the influenza poison, and we know not what others taken as medicaments and aliments, ceased to respond to the call upon it for a more rapid flow of blood, so that aeration could be sufficient, and a faint ensued, with the psychic accompaniments of irresistible terror and dread of dissolution. Never since has this woman been able to bring herself to go alone into a car; the very idea of doing so induces the idea of fainting. She is not possessed by the idea so long as the question of entering a car does not arise; but although she knows her conduct to be unreasonable, she cannot bring herself to act reasonably about going alone into a car.

Discussion of these Cases.—Now, the method of solicitude and sympathy merely reinforces the patient's belief in the validity of the idea for which sympathy is an implicit acquiescence. Still more injurious is direct medical treatment of the apparent physical disorder which results from ideas (12). For instance, a hysterical monoplegia (*i.e.,* a paralysis of one limb induced by the patient's belief that it is disabled) should not be treated by the application of electricity or massage to that limb, nor by the giving of an internal remedy which the patient is led to suppose is capable of removing such conditions. It is very bad practice, too, to pretend to perform an operation upon the patient who believes, *e.g.,* that she is inhabited by a lizard she has swallowed. Sometimes, it is true, a symptom disappears through the suggestion involved in such a procedure; but it does so in a small proportion of cases only, is a pure chance, and does not touch the cause, while by ascertaining and removing the root, we can generally cure permanently, as regards the present symptoms at least.

An illustration of the method is afforded by one of my cases of traumatic neurosis, for this condition is merely the expression of an induced fixed idea of a disability which is recovered from as soon as the pathogenic idea is disposed of.

Case of Traumatic Neurosis.—After bruising his back by a fall from a car, a railroad brakeman remained for six months very lame, and the sensibility of the lower limbs appeared to be lost. His tint had become sallow, and he was dyspeptic and emaciated; he was sleepless, sad, and cried much. The neurological examination (reported with the case, *Med. Record*, October 2nd, 1909), showed that there was no destruction of the nerve elements. The disability was shown by psycho-analysis to be a function of the false fixed idea, induced by the belief derived from his environment that such symptoms as he showed could and should follow such injuries as he had had. One sitting sufficed to begin the correction of this false notion, and he himself completed the persuasion, and was able to return to work in a month, as I had predicted (13).

In Children a Case.—Now, the suggestibility of children is much more labile than that of such cases as I have cited, for while they are very susceptible, they do not usually hold tenaciously, and are easily diverted from their loosely-fixed ideas, when morbid. (See *Archives f. Pædiatrie,* Feb., and *Brit. Journ. Chns. Dis.,* Feb.). For instance, it is perhaps unique for a girl so young as eleven to believe that she is utterly unable to eat, and to do so strongly enough and long enough to overcome the instinct of hunger to such an extent that she had to be removed for treatment to the hospital, where in the Salle Pinel of the Salpetrière, Professor Dejerine built up her emaciated body by generous feeding, and at the same time undid the false notion she had acquired from her elder sister, who had been a patient in the same place. (14)

Trophic Symptoms are not Hysterical.—This manner of causation so far has not been proved capable of directly producing œdema, erythema, urticaria, ulceration, hæmatemesis, hyperhydrosis, dilatation or inequality of the pupils, tachycardia, muscular atrophy, nor any such vaso-motor and trophic disturbances which were formerly included in hysteria; and it is now clear that such cases are due to physical causes (15) which are becoming less and less obscure as pathological data accumulate. Many of these symptoms are angio-neuroses (16), which have nothing to do either with suggestibility nor other psychic processes, even emotionalism.

Similarly, the best observers believe that hyperthermia cannot be produced by psychic means at all, although it is now quite clear that a rise of temperature often ensues after the psychic excitation of patients suffering from hyperthyroidism (17). This, however, is due to the sudden determination of increased secretion of the thyroid gland, which may sometimes even cause death. But if the patient lives, the temperature soon subsides, and its rise cannot be considered psychogenetic in the full sense.

Similarly, the arrest of digestive secretion induced by bad news occurs in consequence of the emotion caused by them. It is strictly temporary (18), unless the emotional state is constantly reinforced from without or within. When the modification endures, we have perhaps the only example of a permanent physical modification of a function not under the control of the will of which the source is directly psychogenetic. Although its genesis is emotional, yet as the motion may be determined through an idea, and the idea may be implanted by suggestion, it may be sometimes legitimate to attribute to hysteria this form of mental anorexia (19), in spite of its manifestation through a portion of the nervous system which is mainly autonomic. That the autonomy of the gastric secretion is not complete, however, has been clearly shown by the researches of Pawlow (20) and Cannon (21); and as no such dependence has been shown concerning permanent changes in the skin and mucous membranes, a better type of evidence than heretofore must be brought forward to convince us of the psychogenesis of the cutaneous manifestations at one time described with hysteria.

Malingering.—I do not wish to do more than remind the reader of the large number of cutaneous eruptions, œdemas, fevers and so on which have been produced by simulators, both hysterical and not. The desire to deceive for the sport it brings, or from no apparent motive, is a symptom which may have nothing to do with hysteria. Dupré has created (22) the term mythomania to characterise this group of abnormality, and every medico-legal expert and many a schoolmaster knows it well.

The number of those cases which "could not possibly have had access to any means of provoking their symptoms," only indicates the looseness with which such negative evidence is accepted, as, for instance, in a case of alternating mydriasis which I observed in Babinski's clinic, for though the patient's father indignantly repudiated the mere statement thereof, yet it was found that his daughter had been placing in her eye drops of an atropine solution filched from her employer.

Another man confessed to concealing a syringe in the rectum, and in a moment of excitement an evacuation revealed two. Of course, mythomania, a type of moral degeneracy, or of lack of adaptation, a weakness which resorts to trickery, may be, and generally is, accompanied by suggestibility; so that, academically speaking, a deliberately produced lesion simulating spontaneous disease which the patient is trying to imitate may deserve the term hysteria; for, of course, imitation is one of the forms of suggestion. Intermediate in type are the imitations of disease seen so frequently in the more ignorant hospital attendants and patients. These, too, often figure as hysterics; and, indeed, this symptom may be induced by suggestion, as in the case of nurses and patients who inflict upon themselves eruptions, ulcers, swellings, or complain of palsies, contractures, vomiting of blood, etc., by the imitation of those they have seen in the hospital. The mental debility which allows them so puerile an outlet for their activities permits them also to receive suggestions without criticism—*i.e.*, to be hysterisable.

Stigmata are Artefacts.—Unless their methods of examination act to remove the symptoms before they can be found, so to speak, the experience of Bernheim (23) and Babinski (24) clearly shows that both anæsthesia and contracted visual fields originate in unconscious suggestions of the medical examination, in the vast majority of cases. For over twelve years neither observer has found a contracted field in a patient not previously examined.

Either explanation is consistent only with extreme suggestibility.

GENESIS OF HYSTERIA.

The cause of this has not been enquired into very profoundly either by Babinski or Bernheim, but attempts to account for it have been made by others. The explanation which commands the most notice is that of Freud (25), who ascribes it to a mental conflict which has arisen as a result of painful experiences in early childhood. It is unfortunate that so many of his followers have attributed the significance of this explanation to sexual insults in themselves; for Freud distinctly states: "I passed a good way beyond my former point of view—correct the imperfections, displacements and misconceptions. My former meagre material gave a great many cases where sexual seduction played the main *rôle;* I overestimated the frequency of these. I have since learnt to explain many as an attempted defence against the reminiscence of masturbation." Freud has also disclaimed his conception that hysteria is predisposed to by passive behaviour in these erotic events, while active behaviour results in compulsion neurosis. He still, however, believes that the elements of constitution and heredity really mean "sexual constitution."

So that, although Freud still attributes the psychosis of obsessions and phobias (26) and also the anxiety neurosis (27) to direct perturbations of the sexual function, he no longer imputes to this immediate cause what he calls hysterical symptoms, which he agrees are purely psychogenic. But he attempts to explain the state of these patients by the subconscious (*a*) effects of a forgotten circumstance—a purely psychic trauma (*a*), which the patient has been unable to amalgamate with the rest of its mental life, and which he has succeeded in forgetting on account of its painful nature. Its memory can, however, be recalled by his "free association" method, which consists of placing the patient in a tranquil attitude and inducing him to think aloud about the events most nearly connected with his illness, and urging him to push his introspection further and further back. Other means of recalling lost memories are the association test of Jung (28), and the psycho-galvanic reaction of Veraguth, with which Jung (29), Petersen (30), and Sidis (31) have largely worked. Still better known is the method of hypnosis. The hypnoidisation procedure of Sidis (32), to the writer, seems very similar to that of Freud.

All of these methods have the common property of abstraction from extraneous stimuli with concentration upon the trend of thought required by the physician; and in this respect the method of simple anamnestic interrogation is in many cases just as informative *when conducted with skill and tact.* But it fails in respect to the vividness of the recollections which it recalls. The patient here *talks about* his experiences. In hypnosis and other distraction methods the patient *re-enacts* his experiences as he would do in his dreams. In the treatment of grand hysteria, Sollier (33) has lain great stress since 1892 upon the need of the patients in hypnosis to carry themselves farther and farther back among their infantile experiences. While Freud says, "There is surely something more, think," Sollier urges "Allez plus loin, plus en arrière." To judge by his early case reports (for he no longer considers it "worth while to publish them"), the results of his treatment do not show any inferiority which would lend countenance to the claim of Freud's followers (*b*) that their method of psycho-

---

(*a*) *The Subconsciousness.*—This term has been much abused, but its consideration here would lead us too far; suffice it to say that the submerged memories which determine much of our conduct and beliefs can scarcely be said to act in themselves, but rather by the inferences which are drawn from them, and of which the subject is more or less aware, although he will not always admit their influence. His denial, however, is largely like that of a woman that she seeks a husband or of a politician that he is looking for an office. If not merely conventional, the disclaimer is dictated by ashamedness or by a dislike for the confession which is so good for the soul. A frequent declaration of my patients is somewhat as follows: "I don't know why I am talking like this to you; I would not dare thus to reveal myself to anyone else; not another person knows these things that I am telling you," etc. Now, this confession has not been obtained through hypnosis nor other special means. In one sense, the patient does not explicitly feel her revelations until they are completed. But could the fact that her ideas require for clear formation their focussing into a definite statement justify us in calling them subconscious? I think not, for the process does not differ from the clarification of thought engendered by writing, speaking or other attempts at precision of ideas which before that may have been only in adumbration. Such was the means by which a patient of Flournoy (40) (whom some clinicians would have called a hysteric) made clear to herself, for her salvation from suicide, the thoughts which lingered in the back of her mind, but which had been temporarily overshadowed by her despair in having to repulse her child for fear of infecting it. In a dream state she had a vision of a dear friend leading her away from the water in which she was about to throw herself. Now, although the conversation she imagined was purely hallucinatory, it was none the less valid as a representation to herself of ideas which took this method of formulation. The mechanism is commonly used by automatic writers, crystal gazers, etc., who have recourse to a consultation with an oracle, which they sometimes believe to be extraneous in source. Others, however, are equally mystical in that they conceive it to be another self, subliminal or subconscious. By these means, the suggestive influence of their lucubrations is greatly increased; but psychologically, the process is exactly the same as that of discussion, thinking aloud, or reflection. "Coconsciousness" is the name given by Prince (41) to some of these states, which he believes to be completely dissociated from the personality. As a rule, however, any disunion of separate streams of thought can be quickly overcome by simple means, provided that the observer does not acquiesce in the patient's reluctance to face certain unpleasant facts, which he often declares "he does not know," and soon persuades himself that "he cannot know."

(*a*) But is it really necessary to invoke a specific trauma to explain hypersuggestibility? Is it not a common experience that when the mind is strongly pre-occupied by any course of thought absent-minded acts are the rule? What are these but immediate reactions to stimuli while the reflective processes are occupied by the dominant train of thought? In a sense, that which pre-occupies the patient is dissociated from the stimulus to which he reacts while absent-minded, and indeed from the events of daily life, as long as the pre-occupied state persists. To this extent, hysteria is a phenomenon of psychological dissociation. This explanation of its mechanism is not very different from what Freud has called conversion. Psychologically the process is the same as that occurring in suggestion.

(*b*) It has been alleged that Freud and his followers inevitably guide the revelations of their patients towards the ideas of which they are in search, and that they strongly influence the content of the patient's thought. This is tantamount to saying that some at least of the patient's ideas arise from the suggestion of the examining physician. When one remembers the ease with which even physical symptoms are suggested, this objection has *à priori* much force in so delicate a field as psychological investigation. The controversy can be settled only by impartial and well-trained observers working with Freud's method. At all events, it is becoming more and more clear that sexual traumata of early childhood need not produce a psycho-neurosis, and that, at least, the active cause of psycho-neurosis in some patients appears quite unrelated to the sexual life. One is tempted to believe that the enthusiasm of discovery has tended to an exaggeration of the weight of this ætiological factor, especially in an age where a reprehensible prudery has prevented its due consideration by the profession at large. But it is significant that analysis is a *sine qua non* in obstinate cases; for these recalcitrant cases are just those which find their way to Sollier.

Diagnosis must be Genetic.—Now, from these facts, it should be apparent that a hysterical symptom, being one induced by an idea derived from suggestion, can only be removed with certainty and permanence by a preliminary finding of the causative ideas. Empirical methods are worse than futile; for they merely reinforce the patient's belief that she is badly sick.

The peculiar fact about this pathogenic search is that the mere discovery and explanation of the causative idea of the patient generally may suffice to remove the symptoms it has caused.

But it does not cure the disease. To do this, a course of re-education (34) of the patient's hysterisability is needed. This is not always possible in practice, on account of the time and expense required.

But we are now in a position to dispense with some of the elements of this expense. I refer to prolonged isolation, over-feeding, massage, electrical applications and special nursing. to which so many hysterics have been subjected on account of the secondary neurasthenic symptoms they have developed..

The means of distinguishing this false neurasthenic state from the really primitive asthenias have been indicated at length by the writer (35); and Bernheim (36), too, has devoted a recent monograph in part to this distinction, which is in short that "neurasthenia is a physical exhaustion, either congenital, toxic or other; and that any psychic symptoms a neurasthenic may present are usually secondary and disappear spontaneously as his condition improves"; unless, indeed, they are maintained through the reinforcement of their suggestion by the injudicious solicitude of doctor or friend, in which case they are hysterical, of course.

On the other hand, the neurasthenic symptoms which are induced by a fixed idea of illness soon disappear when the patient's ideas are rectified, as illustrated by my case of traumatic neurosis, and by many a woman who, when exigencies of her own temper have demanded, has arisen from a sick bed into the full activity of normal life.

Isolation Needless or Harmful.—The fetish into which the Weir Mitchel treatment has been erected has been demolished by the recent work of Levy (37), who shows the Dubois' way of conceiving the relation of body and mind (38) does not differ from the dualism he imagines he has transcended; and Levy points out how grossly and naïvely Dubois exaggerates the influence of the psyche over bodily conditions. In this respect Bernheim has long transcended his former views regarding the power of hypnotism: he has done so by acquiring a clear notion of the difference of psychogenic and somatogenic nervous symptoms.

Now, Levy shows that true isolation should not be a physical removal from environment, but a moral substraction from fears, preoccupations, obsessions, morbid ideas; and that this can be done even better in the usual surroundings than during isolation. Even that bugbear of the physician, the patient's friends, can be converted into an aid instead of a hindrance where intelligent people are concerned. The chief appeal for the method of isolation is the power it gives the doctor to "persuade" and reason with his patient. But even this Levy believes to be of little use unless an opportunity is given the patient to practise the resolutions he forms; and as he cannot do this while isolated in bed, such treatment is injurious, for his best intentions will wither like a hot-house plant in the open when he has to face the stresses of his life. One might as well learn to swim on the couch or to play the piano by listening to lectures and discussing them.

Another fault of the Weir Mitchel treatment of psychoneuroses is its stress upon details: the really important thing is that the patient thoroughly grasp the principles upon which his disorder depends, and that he practise himself under the physician's direction in learning to avoid the pitfalls which life affords for his neurotic constitution. He must learn his own psychology and the dependence of his bodily health upon his mental state; but he must also learn that body and mind are only two sides of one thing, and that bodily conditions react upon his mental state, and that susceptibility to suggestions may be vastly increased by fatigue, dietetic errors, or any cause of intoxication of the neurones. Even prolonged mental stimulation, by the excessive interest which does not know when to stop, may be a source of a neuronal state favouring suggestibility.

Beautiful examples of rational as opposed to empiric methods of treating hysteria are the following:—

Case IV.—A woman, æt. 28, whom I saw in February, 1911, with Dr. Hardin, to whom she was referred by Dr. Maphis, of Warrenton, Va., in the preceding June, had had a chill after which she cried. The next day she felt very weak, and the next day she had pain in the knees, she thinks only in the left, with hyperæsthesia. There was also, she says, tenderness of the lumbar spine, and later on in the groin and hip. She was treated by massage, and for four months was relieved. About Christmastime these pains recurred when her sister visited her. There were then nausea and persistent dull pain in the knees, which caused her to groan in her sleep.

Examination was negative, except that there was great hyperæsthesia of both knees and one arm. Also the right abdominal reflex was absent, and the adductor reflex was exaggerated on the same side. I decided that the case was psychogenic, and that afternoon attempted psychanalysis to seek the origin of the psychalgia. I found two suggestive incidents, one being the visit of a sister on the second occasion, the other being the fact that when first attacked her brother had a severe hysteric spell. He had consumption, which she feared. Another fact perhaps significant was that she had been two weeks in a newspaper office during its change of ownership, alone with the man in charge much of the time.

As she could stay in Washington only a short time, I concluded that it would be better to remove the effects of whatever had been the source of the hysteric symptoms of psychomotor discipline than to try to pursue psychanalysis, which might be unfruitful in the short time at her disposal.

Method.—As the least approach towards the patient's knee would set up a spasm of terror, during which adductors, hamstrings and extensors went into spasm, I began a course of gradual habituation, first to the approach of a person's hand toward the knee, later to manipulation of the patellar region, followed by pressure on it. A sister attended her in hospital and helped her to accomplish these exercises several times each day. In this way she taught herself in a few days to control the muscles around the knee-joints so as to prevent them contracting when her knee was touched. The pain ceased when the spasm did, as it was in part maintained by the latter. Then her alarm vanished, as there was no reason for it; and she was satisfied that her pain lay in her own power to control. The dangers of prepossession by a fear, in conjunction with the mental vacuity engendered by lack of occupation, were explained to show the genesis of false fixed ideas regarding disease, and she was told how to avoid them.

She returned to Virginia in a week well, and has remained so for nearly two years.

Case V.—A further case illustrating the effect of

French observers, of whom this fault cannot be alleged, do not attach preponderant importance to the sexual factor in neurotic disturbances. The free association of thought at which Freud aims during psycho-analysis is believed by him to resemble that of the dream state. But neither during the dreams of sleep nor still less in day dreaming is there that complete suspension of auto-critical judgment one might suppose were only the fantasticalness of dreams considered. Even the bizarre images of the dream are symbols of a latent psychic content often unsuspected by the patient. In the same way he interprets a hysterical symptom as an unconscious conversion by the patient into a physical symptom of a thought which, in its naked form, he could not bear; and it is in finding of these that psycho-analysis is so useful. The suppressed experiences are particularly active in dreams. Hence analysis of these is most useful as a short cut to an understanding of much which the patient's waking mind is ignorant.

proper discipline is that of a barking, roaring and bowing tic removed in one day. The patient was referred to me by Dr. Thomas Charles Martin. He had been treated for rectal ulcer for some months. He had recently removed to North Carolina, but wanted to come back to Washington. It is possible that this had something to do with the development of his condition. I was asked to see him, because when he sat down he would utter a series of barks, while at the same time the trunk would go into a spasmodic flexion. When he was stripped, there were seen strong abdominal muscles and regular bowing of the whole body along with this barking, grunting noise.

Psychanalysis showed that these attacks had begun suddenly in North Carolina at 10 p.m. three months before. The significant fact was that he had eaten sandwiches which had been sent to him by his parents in Washington, and that he had been thinking despondently before he went to sleep about how nice it would be to be in Washington. He was also thinking considerably about his intestines having been under treatment by lavage. The exact psychologic mechanism was not discovered, however.

Method.—I thought it better to remove the effects rather than necessarily to discover the details of the genesis of his tic. So I instituted a course of psychomotor discipline. The tic, which at first had come only when he lay down at night, had later occurred whenever he sat down also, and thus made life a burden. So we began by exercising in the sitting position. I placed him in a large chair, reclining, showing him how deliberately to contract the recti abdominis, and made him perform a series of respiratory movements, as well as the series of rectitory movements. After a few moments he became capable of contracting either the recti or the diaphragm. That being accomplishment enough for one sitting, he was asked to come back the following day. He went home and tried the exercise while recumbent at night. The result was that he came back next morning and said, "Doctor, I am cured. I did not have any spell last night." Two days later, however, he relapsed. But after another discipline he remained well.

Thus it is simple to remove the effects in this rational way. It is so much better than the rough suggestion often attempted. For example, the last patient had been treated by electricity, which he was assured would remove his spasms. When this failed he was treated by direct suggestion. When this failed he was treated by "the most marvellous remedy known," a drug obtained from some remote country, which was guaranteed to cure. Thus, the most powerful suggestions failed in a case which was in origin suggested and conformed to Babinski's definition of hysteria, "susceptible of production by suggestion." A motor habit had been formed, and the removal of all habits requires re-education of the patient's volition.

Indeed, it is only by its action on the will that suggestion ever succeeds.

Now, although hysteric symptoms are always psychogenetic and have a mechanism the knowledge of which enables the clinician to penetrate to their origin, yet hysterisability varies with bodily states (39), so that the treatment of hysteria cannot safely be left to those laymen who have arrogated to themselves the title of psychotherapeutists by an assumption which is justifiable only to the minds of dualists and those who attach no validity to the old adage which becomes more and more true as our psychologic knowledge broadens and deepens, *mens sana in corpore sano.*

The application of the principles described in this article is shown in ten cases which I recently reported.

References.

(1) "Studien uber Hysteric," 1895.

(2) "Sammlung kleiner Schriften zur Neurosen-lehre Vienna," 1906.

(3) "Automatism Psychologique, Paris," 1889.

(4) "Multiple Personality," New York, 1900.

(5) "Genèse et Nature de l'Hystérie," Paris, 1897.

(6) "Soc. de Neurol. de Paris," 1901.

(7) "Conférence Devant l'Internat," Paris, 1906.

(8) A Neologism Coined by Babinski from the Greek words πειθὼ, meaning persuasion, and ἴατος, meaning curable.

(9) "Soc. de Neurol. de Paris," 1908.

(10) "Hypnotism, Suggestion," *Psychothcrapie*, Paris, 1893.

(11) "The Difference between Suggestion and Persuasion." *Alienist and Neurologist.* 1909.

(12) Author, "Le Role du Médécin," etc. "Congres. des Neurologistes Français à Lille," 1906.

(13) "Congrès International des Accidents do Travail," Rome, 1909.

(14) Leçons Cliniques. 1907. Unpublished.

(15) Medicini Bono. Congrès de Genève. 1907.

(16) See Solis-Cohen. *New York Med. Jour.* 1910.

(17) Crile. *Amer. Jour. of Surg.* 1908.

(18) Author. "Intellect and Emotion in Traumatic Neurosis." Southern Psychological Soc., 1909. *Jour. Abnor. Psychol.* 1910, June.

(19) Author. "The Most Frequent Cause of Nervous Indigestion." *Jour. Abnor. Psychol.* 1909, Feb.

(20) The Work of the Digestive Glands. London, 1902. *Brit. Med. Jour.*, 1906.

(21) *Amer. Jour. Med. Sci.*, 1909.

(22) "La Mythomanie," Paris, 1906.

(23) "Comment je Comprends le Mot Hystério." *Bul. Med.*, 1907.

(24) *Loc. Cit.*

(25) *Loc. Cit.*

(26) *Loc. Cit.*

(27) *Loc. Cit.*

(28) "Uber der Psychologie die Dementia Precox," Leipsic, 1906.

(29) *Jour. Abnor. Psychol.* 1907.

(30) *Brain*, 1907.

(31) *Psychological Review*, 1908, 1909, 1910.

(32) *Boston Med. Jour.* 1909.

(33) *Loc. Cit.*

(34) Author. "The Nature of Hysteria." *International Clinics*, 1908. See also "Psychoprophylaxis in Childhood and Psychotherapeutics," Boston, 1910, and *Jour. Abnor. Psychol.*, 1909, June. Also "Requisites for the Treatment of Psychoneurosis." *Monthly Cyclo.*, 1909, etc.

(35) *Archives of Diag.* 1909.

(36) "Neurasthénies et Psychoneuroses." Paris, 1908.

(37a) "Le Role du Med., etc." *Loc. Cit.*

(37) "Neurasthenie et Nevroses guerison definitive en Cure Libre." Paris, 1909.

(38) "La Traitment Psychic. de la Psycho-nevrose." Paris, 1904.

(39) Williams. "Nature of Hysteria." *Loc. Cit.*

(40) "Automatise Téléologique Contre la Suicide." *Arch. de* Psychol. 1908. See Author. *Review Jour. Abnor. Psychol.* 1909.

(41) *Jour. of Abnor. Psychol.* 1909.

OPERATING THEATRES.

ST. THOMAS'S HOSPITAL.

Carcinoma of Undescended Testis.—Mr. Corner operated on a man, æt. 37, who had been admitted with the following history: The patient first noticed a lump in the lower part of the abdomen about a month previously. It was then of considerable size, and his attention had been drawn to it by pain in the left groin running round to the back. Since this time, however, there had been very little pain, and the tumour had caused no inconvenience. There had been no difficulty in micturition or in defæcation, but the man had recently lost weight.

On examination the patient was thin, but did not look anæmic. The lower part of the abdomen was protuberant, but the skin was not inflamed. On palpation a hard painless mass could be felt in the abdomen to the left of the middle line and just above Poupart's ligament; it was apparently in the abdominal wall, but was not attached to the skin. The fingers could be insinuated under the upper end, which was well defined and somewhat irregular. On the left it was limited by Poupart's ligament; on the right it extended nearly as far as Poupart's ligament on that side. Below it reached the symphysis. It could be moved laterally to a slight degree, but not vertically. A soft mass could be felt in the left inguinal canal; this was thought to be the testis, which had not descended. It did not, however, give testicular sensation, and, as far as could be made out, was not connected with the mass in the abdomen, which last could also be felt per rectum in the region of the prostate. Another mass could be felt deep under the left costal margin; this mass was nodular, and did not move with respiration. A median incision was made below the umbilicus, and the growth was easily found in the anterior abdominal wall. As there was a great deal of glandular affection it was impossible to remove the tumour, which had the appearance of a sarcoma. A second incision was made in the left groin, parallel to Poupart's ligament. No testis was found in the inguinal canal;

the mass that had been previously felt turned out to be a loop of the vas deferens which had come through and then returned through the ring. Both wounds were closed in the usual manner. The patient's temperature only once rose above the normal, and that was on the day following the operation, after an injection of Coley's fluid. It was remarked that his arteries were atheromatous, but there were no cardiac murmurs.

The result of a pathological examination of a specimen was that the tumour was a carcinoma of the testis.

HYDATID CYST ATTACHED TO THE LEFT LOBE OF THE LIVER BY A LONG PEDICLE.—The same surgeon operated on a girl, æt. 3 years and 3 months, who had been admitted with the following history: Two days before, in the morning after defæcation, she complained of acute pain in the right iliac fossa, which continued until she was brought to the hospital. In the evening of the day when she first felt the pain she experienced nausea whilst at supper, which feeling continued. She lost her appetite, and the bowels had not been opened for two days. She had been sent to the hospital by a medical man with a diagnosis of appendicitis. After admission the child lay on her back, complaining of pain low down on the right side of the abdomen. Temperature, 101.6; pulse, 130; respirations, 36. Movements of the abdomen equal on both sides. Some rigidity of the recti in the lower half, more on the right side than on the left. No tenderness on palpation, excepting in the right iliac fossa, where a tender mass could definitely be felt. This mass felt fairly soft, but the rigidity of the rectus prevented the outline being absolutely defined. The respiratory and cardio-vascular systems were normal. Pulse good, but rapid.

At the operation the right rectus sheath was opened and the muscle displaced, and a trap-door incision made through the peritoneum. A cyst about the size of a tennis-ball was found in the right iliac fossa, attached by a long pedicle to the right lobe of the liver, by a broad base to the left of the gall-bladder. The surface was everywhere inflamed. There was a moderate quantity of free fluid in the abdomen. The pedicle was clamped and the swelling removed; this was found to be a cyst full of fluid, which was clear and colourless. The cyst had a thick, fibrous outer wall with a thin inner lining membrane.

SPECIAL REPORTS.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE, LONDON, 1913.

SECOND NOTICE.

THE number of receptions, soirées, garden parties, excursions, and other social functions in connection with the Congress was really bewildering, but our foreign guests thoroughly enjoyed themselves, and all the members made the most of the opportunities that presented themselves for having a "real good time." At the closing meeting on the Tuesday, it was announced, in addition to that previously chronicled, that the following resolutions had been sent up by the Sections of the Congress:—

A.—By the combined Sections of Dermatology and Syphilography (XIII.) and Forensic Medicine (XIX.):—

"That, sensible of the ravages wrought by syphilis in the health of the community, and deploring the inadequacy of existing facilities for checking its dissemination, the International Medical Congress calls upon the Governments of all the countries here represented—(1) To institute a system of confidential notification of the disease to a sanitary authority, wherever such notification does not already obtain. (2) To make systematic provision for the diagnosis and treatment of all cases of syphilis not otherwise provided for.

B.—By the Section of Tropical Medicine and Hygiene (XXI.):—

"(*a*) The Section is of opinion that beri-beri among natives who live principally on rice is brought about by the continuous and too exclusive use of rice submitted to a too complete milling, which removes the cortical and sub-cortical layers of the grain. (*b*) The Section urges all authorities charged with the health of native communities to restrain by every means in their power the use of this rice in the dietary of coolies. (*c*) In view of the proved non-infectiousness of beri-beri, the Section suggests that all port and sanitary authorities should abolish foreign quarantine and other restrictive measures against this disease. (*d*) The Section resolves that the malady known hitherto under the name of Malta fever shall in future be named 'undulant fever.'"

C.—"That this Congress records its conviction that experiments on living animals have proved of the utmost service to medicine in the past, and are indispensable to its future progress. That, accordingly, while strongly deprecating the infliction of unnecessary pain, it is of opinion alike in the interests of man and of animals that it is not desirable to restrict competent persons in the performance of such experiments."

All these resolutions will be considered by the Permanent Commission.

The Permanent Commission proposed the following resolution to the Congress:—

"The Permanent Commission, considering that the hospitality of its English colleagues has surpassed all expectations, and considering that this gigantic Congress has been admirably prepared and organised, expresses its sincere and profound gratitude to the Committee of Congress and in their persons to the whole medical profession of England."—Report of Permanent Commission. (Signed) H. BURGER, Gen. Sec.

The President then proposed a vote of thanks from the Congress to the Government of H.M. the Queen of Holland for their generosity in defraying the expenses of the Permanent Commission of the International Congress of Medicine.

The delegates next bade farewell to the President of Congress, and Sir Thomas Barlow bade farewell to the Congress and closed the meeting.

THE MEDICAL MUSEUM.

Two spacious rooms in the Imperial College of Science, South Kensington, are occupied with what was, probably, the finest collection of pathological and medical exhibits ever shown at a medical gathering. The greatest credit is due to the unceasing labours of Mr. H. W. Armit, who, as Hon. Secretary of the Museum Committee, not only prepared a complete catalogue of some 500 pages in English, French and German, but, in conjunction with the International Association of Medical Museums, he organised a special section dealing with the various modern methods of preserving and exhibiting specimens. In this special department, Dr. Maude E. Abbott, Secretary of the International Association of Museums, acted as collaborator. Here were illustrated various methods of preserving morbid specimens after the Kaiserling method, of rendering organs and tissues transparent for demonstration purposes. Perhaps the most striking exhibit was that by Professor B. Wahby, of Cairo, whose method of injecting fusible alloy into blood-vessels to show the branchings excited great interest. Space will not permit of a detailed description of all the exhibits in the other sections, but special mention may be made of that showing the effects of dust in producing diseases of the lungs, arranged by Dr. E. Collis, of the Home Office, London (Section XVIII.). In Section XXI. were exhibits showing polyneuritis in beri-beri, produced experimentally by defective feeding, by Drs. H. Schaumann (Hamburg) and Casimir Funk (London). Mr. J. E. R. McDonagh showed photographs and microscopic slides illustrating the different stages in the development of the leucocytozoon syphilidis. The wax models and photographs of true and false hermaphroditism shown by Dr. Magnus Hirschfeld (Berlin) formed an interesting collection. From the Bureau of Plant Pathology, U.S.A., was an important exhibit of plant cancer.

International Gathering at Bath.

Special mention must be made of the excursion to the famous city and bathing establishment of Bath on August 13th, when a large party of members and their wives enjoyed the hospitality of the Mayor and Corporation. An examination of the historical Roman baths, a visit to the renowned Pump Room, and a tour of the chief places of interest in motor-cars, enabled the visitors to form some idea of the glories of this ancient health-resort. The guests were entertained to lunch in the banqueting-room of the Guildhall. Dr. Robert Abbe, of New York, proposed the toast of "The Hot Mineral Springs of Bath," to which Lord Alexander Thynne replied.

The Medical Exhibition

was unique in the extent of its organisation and the attractiveness of its exhibits. There were no less than 187 stands at which were shown every conceivable requisite for use in medicine, surgery and nursing. Space forbids our enumeration, but we may mention some of the most important in the various sections.

Foods and Beverages.

The Apollinaris Company were well in evidence with an exhibit in which that most useful and popular natural aperient water, Apenta, occupied a prominent position. Nothing need be said as to the attractions of Apollinaris water. The notice of medical men, however, may be particularly drawn to the large stone bottles in which this famous water is now supplied for table use. The cork is easily drawn from these bottles, and the water is clear, cool and sparkling. Patent stoppers are supplied by the company, and there is no doubt that by the use of these large stone bottles great economy can be effected. The firm, moreover, offer special terms to the medical profession, who can thus obtain this fine table water at a cost that compares favourably with ordinary syphon soda water.

The Angier Chemical Co. were showing their well-known emulsion and also some very effective throat and cough tablets. An attractive exhibit was that of the Horlick's Malted Milk Co., whose ideal food drink and malted milk lunch tablets afford a striking example of modern scientific methods as applied to the preparation of easily assimilable nutriment. Numerous specimens of natural mineral waters were exhibited by Messrs. Ingram and Royle, Ltd., notably those of Carlsbad, Chatel Guyon, Contrexéville, Hunyadi Janos, and Vichy "Celestins." Messrs. Keen, Robinson and Co., Ltd., were showing their famous preparations of barley, groats, as well as Colman's mustard and sinapisms. Lemco and Oxo were well to the front with their invaluable concentrated preparations of beef. The Maltine Manufacturing Co. exhibited their well-known "Maltine," plain, or in combination with cod liver oil, pepsin, or cascara. At the stall of Mellin's Dietetic Preparations were to be seen "Lacto," a dry powder consisting of pure fresh cow's milk and Mellin's Food, and Mellin's Food biscuit and chocolate. A fine assortment of milks and chocolate were on view at the stand of the Nestlé and Anglo-Swiss Condensed Milk Co. Next to this was the exhibit of St. Ivel, Ltd., who were showing their renowned lactic cheeses, also a concentrated food consisting of pure milk caseinogen, with lecithin and glycerophosphate of soda, known as "Visem." Diabetics were well catered for by Messrs. G. Van Abbott and Sons and also by Messrs. Collard and Co. Numerous peptonised milk preparations were on view at the stall of Messrs. Savory and Moore, Ltd., as well as their well-known food. Virol was also much *en évidence.* The valuable preparations of "Bovril," Ltd., formed an attractive exhibit, while the well-known essences of Messrs. Brand and Co. were shown side by side with "Ferrocarnis," an iron tonic food, as well as "Fever Food," for use in the tropics.

Drugs and Appliances.

The Denver Chemical Manufacturing Co. made a direct appeal to the visitors with their well-known "Antiphlogistine." The Chas. S. Phillips Chemical Co. showed their well-known drugs. First and chief was the Phillips Milk of Magnesia, which has always seemed to the writer one of the most perfect of pharmaceutical preparations. Practically tasteless, each fluid ounce contains some 24 grains of magnesium hydrate. For children, it is a most valuable and convenient form of administration of what is probably one of the most widely used remedies in the pharmacopœia. Another excellent product is the Phillips compound phospho-muriate of quinine, which is put up in elixir and in powder form. The formula is printed on the label.

Messrs. the G. W. Carnrick Co. were represented in their usual comprehensive manner. It would be impossible to mention in detail their numerous preparations. A word, however, may be given about trypsogen, which is claimed to contain the internal secretion of the glands of Langerhans, and thus to supply the deficiency met with in diabetes mellitus. It has, at any rate, been shown that the internal secretion of the pancreas plays an important *rôle* in the metabolism of the carbohydrates. Another scientific preparation of this firm in secretogen, which contains the hormone, secretin, which was shown by Bayliss and Starling to act as the physiological stimulus to the outpouring of the digestive enzymes. It is more rational thus to stimulate with secretin than to supply artificial digestive ferments. Secretogen is sold in tablet and in elixir form.

Messrs. Armour and Co. made a good show with their well-known digestive ferments and other preparations. A specially elegant remedy is their elixir of enzymes. It is most palatable, and its possibilities in bringing relief to dyspeptics may be gauged from the fact that a single tea-spoonful is sufficient to peptonise 1,000 grains of albumen. Their pituitary liquid is obtained from the pituitary body of the ox. It is a clear, colourless solution, put up in one cubic centimeter ampoules for intra-muscular injection. The junket powders of the same firm may be specially commended for use in hospitals. Being in the form of a dry powder it keeps sweet indefinitely. Vigoral is an essence of beef worthy of notice by all who have to cater for invalids. It is also sold in cubes for the convenient making of bouillon.

The Bayer Company showed an extensive collection of their many well-known drugs, which have in some cases become household words in medicine, such as phenacetine, sulfonal, trional, aspirin, protargol, mesotan, and tannigen. An interesting new preparation is cycloform, which acts as a superficial antiseptic and anæsthetic. It can be used as a powder or as an ointment. In the latter form it contains 10 per cent. cycloform and white hazel, and is specially recommended in the treatment of hæmorrhoids and pruritus. Jothion was also shown. There is little need to remind medical readers of the convenience of a non-staining preparation which contains no less than 80 per cent. of iodine in organic combination. It is put up as ointment in original tubes containing 10 per cent. of jothion, and in this form will be found useful wherever iodine treatment is necessary.

A magnificent show was provided by Messrs. Burroughs Wellcome and Co., who commanded the attention of visitors upon arrival. In addition to a fine exhibit of pharmaceutical preparations, first aid appliances and medical equipments, were to be seen the firm's hypodermic and other syringes, dressings, standardised vaccines, sera and tuberculins, as well as a unique collection of medicinal plants from their materia medica farm at Dartford. Messrs. Thos. Christy and Co. showed numerous chemical products of use in medicine, such as glyco-heroin, glyco-thymoline, lysoform, ergoapiol, among other known and trusted preparations. At the stall of Messrs. Fairchild Bros. and Foster were to be seen "Panopepton," and a valuable wheat and milk food known as "Laibose." Among the many interesting exhibits shown by the Hoffmann-la Roche Chemical Works, Ltd., were omnopon, thiocol and thigenol, the latter being a valuable organic sulphur compound. No less than fifteen preparations of cyllin were shown by Jeyes' Sanitary Compounds Co., Ltd. The various preparations of glidine, a pure, concentrated food made from wheat, with lecithin, iodine, and bromide, as well as iodex, a non-staining iodine, were shown by Messrs. Menley and James, Ltd. A large number of bacterial vaccines and sera were exhibited by the H. K. Mulford Co. The new therapeutic agents known as "Phylacogens," based upon the theory of multiple infections, were prominent at the stall of Messrs. Parke, Davis and Co. Among the pharmaceutical preparations shown by the J. D. Riedel Co. were "Aperitol," a compound of phenolphthalein with the sedative principle of valerian, "Mergal," an organic mercurial salt for use in syphilis, and "Gonosan," a valuable remedy in gonorrhoea. "G.B." diabetes whisky, "Junora," the "wine of health," and "Lecithin-Ovo," were the main exhibits at the stall of Messrs. Humphrey Taylor and Co.

It may be added that Messrs. Burroughs, Wellcome and Co. have secured unique distinction in connection with their exhibit at the International Congress of Medicine. In two of the sections the highest possible award has been conferred upon them by the international jury for their pharmaceutical preparations, fine chemicals, and antiseptics in section 2, and in section 5 for serum therapy, organo-therapy, and bacteriology.

(To be continued.)

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Aug. 16th, 1913.

CIRRHOSIS OF THE LIVER.

THE medical treatment of alcoholic cirrhosis of the liver should be, says Dr. Fiessinger, that of stimulating hepatic neo-formation. From modern anatomical researches it has been shown that a cirrhotic liver endeavours to compensate the functional troubles produced by sclerosis by multiplying its parenchymatous cells; the compensation is thus effected under the form of cellular hyperplasia. The clinician should consequently seek to stimulate this reaction by acting directly or indirectly on the hepatic activity. The first thing to be done is to diminish or restrain the progress of intoxication by an appropriate *régime.* Certain authors recommend the use of intestinal antiseptics (naphthol, salol, benzonaphthol, etc.), but clinical facts have shown that this treatment is illusory, the absorption of antiseptics possessing, as proved by Dr. Robin, an antiseptic effect and this accentuates digestive fermentation, hence intoxication. Consequently no chemical antiseptics should be prescribed; they may be replaced by lactic ferments.

As hepatic stimulants, Dr. Robin classes them as follows:—

Stimulants of the mineral series.
Stimulants of the vegetable series.
Stimulants of the animal series.

Of the first named, bicarbonate of soda in small doses, half a drachm to a drachm daily, is a good stimulant of the biliary secretion. It should be prescribed in solution and taken half-an-hour before meals and two hours after. Phosphate of soda is a weak cholagogue; it is prescribed in the same doses as the bicarbonate. Benzoate of soda is much employed for the accumulation of uric acid; it is also diuretic and an hepatic stimulant. It is prescribed in 10 or 20 grain doses three times a day. Sulphate of soda is also a cholagogue and a diuretic in small doses and laxative over two drachms. It can be prescribed with bicarbonate of soda—

Bicarbonate of soda, 1 oz.
Sulphate of soda, 1 oz.,

a teaspoonful in a tumbler of tepid water every morning.

Dr. Robin combines all the above in one formula:—

Bicarbonate of soda, 2 drs.
Phosphate of soda, 1 dr.
Sulphate of soda, 1 dr.
Benzoate of soda, 40 grs.
Iodide of potassium, 20 grs.

For one packet, dissolve in a quart of boiled water. Three ounces in the morning and renewed half an hour before each meal (2) and two hours after dinner. The solution is warmed and drunk slowly. A large glass of Vichy water (Célestins) with a teaspoonful of Carlsbad-Sprudel salts (bicarbonate of soda, sulphate of soda, chloride of sodium) may be substituted, or Rochelle salts, one or two drachms taken fasting in a glass of warm water.

To the foregoing treatment Dr. Castaigne adds a ferruginous treatment. Iron seems to stimulate the hepatic cell, to improve the general condition and diminish hepatic insufficiency. All these drugs are necessary, but might be employed alternately, each covering a period of 10 days. For instance,

Robin's formula, 10 days.
Carlsbad salt, 10 days.
Rest or Rochelle salt, 10 days.

Stimulants of the vegetable series comprise: Boldo leaves (40 grains infused in a cup of water sweetened with a teaspoonful of glycerine, taken at bedtime); boldine (four pills during the day); jaborandi (five grains in infusion three times a day); drastis, as Cape aloes, podophyllin, euonymine, etc., associated with ext. of belladonna to diminish painful contractions. Stimulants of the animal series include glycerine (two tablespoonfuls at night in an infusion of boldo), ox gall, powdered liver (a teaspoonful at the beginning of each meal) (2).

Such are the different agents at the disposal of the clinician for the treatment of cirrhosis of the liver. Their use may be alternated, associated, or combined to obtain a better effect, but success is not always certain. Frequent are the cases where progressive evolution towards hepatic insufficiency is beyond the control of therapeutics, especially in cases of atrophic cirrhosis, much less amenable than the hypertrophic form.

GERMANY.

Berlin, Aug. 16th, 1913.

AT the Society for Surgery Hr. Körte reported three cases of

OPERATION FOR ACUTE PANCREATITIS.

Certain points were common to the whole of the three: they were all of middle age, and were not especially fat. Two of the patients were women. The attacks came on suddenly without any warning. There was collapse, with excessive irritation in the abdominal cavity, which gave rise to the suspicion of ileus. In two of the cases a diagnosis could be made at the onset, as the pain first appeared in the epigastrium. The third case was looked upon as one of appendicitis; but on opening the abdomen exudation and necrosis of tissue made their appearance. In all the cases the exudation was hæmorrhagic. In order to get at the pancreas the gastro-colic ligament was divided, the capsule opened by a blunt instrument. In no case was any abscess found. As regarded the gall bladder the result was negative; there was no implication on its part, although in one case it had been stated that the symptoms had implied such an implication. A drain was inserted that reached to the pancreas. The pain ceased. The secretion discharged was at first serous, later purulent. Small particles of pancreatic tissue were cast off. In one case a pancreatic fistula remained open for a long time notwithstanding the administration of soda. In both the other cases the fistulæ closed readily.

The speaker considered that early operation was called for in all cases in order to prevent spread of the necrosis.

Hr. Bier spoke on the

ULTIMATE RESULTS OF TOTAL EXTIRPATION OF TONGUE.

He showed a man, æt. 36, on whom V. Bergmann operated for carcinoma of the tongue in 1901. In April, 1910, a recurrence occurred, for which another portion of the tongue was removed, leaving only a small stump. The floor of the mouth down to the cutaneous tissues was cleared out. In August, 1910, with return of the disease, another portion was removed, and on December 15th of the same year still another portion. The patient was now free from disease. The speaker remembered a case of

Esmarch's who was operated on 15 times for recurrence of cancer. After all this the man still lived 15 years. The speaker reported two other cases of unilateral extirpation with a permanent good result, and recommended that recurrences should be removed in every case. Permanent cures might be obtained even without the application of the Röntgen rays.

Hr. Borchardt mentioned a case of melanosarcoma that had been operated on six or seven times for recurrence, and which was now free from disease. At the Medical Society of Kiel, Hr. Langes related his experiences in the

Treatment of Myomata and Uterine Disorders by Rontgen Rays.

Beginning with a filter of aluminium, he soon went on to four, then went back to three, and treated each part by dividing the field into three. The parts thus treated were the abdomen, the sacrum, the parts adjoining, and, according to the severity of the case, the vagina, through lead speculums, and the perineum. In order to test the action through the sacrum and the ischiatic foramina, a pencil of pitch pine wrapped in an indiarubber finger-stall was inserted into the cavity of the uterus. The pencil was blackened equally whether the rays were passed through the anterior abdomnial wall or through the sacrum. The instrumentarium consisted in a rotax interrupter, Burger tubes with a 2mm. loading and 6 B.W. dosage, and an arrangement whereby the dose, which was mostly 20 pro field, could be varied at pleasure. No serious mischief was set up, at most some pigmentation of the skin. Of the fifteen cases of myoma that were accurately followed, 8 became amenorrhœic and 6 oligomenorrhœic, 14 showed distinct signs of reduction in size, the fifteenth case was a failure, due to faulty *technique*. Of 39 cases of uterine disease 24 became amenorrhœic, 9 oligomenorrhœic, 6 remained unchanged; in one the hæmorrhage was worse, so that total vaginal extirpation of the uterus had to be performed. All the cases of failure were treated in the early period of faulty *technique*. With the treatment as at present carried out there had been no failures. Success was generally obtained after two or three applications. Hr. Stoeckel was of opinion that moderate doses were the best; small ones did no good, and large ones sometimes did permanent mischief In the cases of myomata in young women he would always operate; application of X-rays amounted practically to castration, and objectionable symptoms that accompanied the menopause might be troublesome. We did not know which cell elements of the ovary were responsible for the internal secretion. He then spoke on the

Results of the Treatment of Inoperable Carcinoma,

which had been reported as brilliant. They had been so striking that the hopes of the profession had been revivified. It was unfortunate that mesothorium had now attained such a "pocket value" that it was nearly all snapped up by one or two institutions, so that most could only look on and watch how it succeeded in the hands of others; the individual having no chance of testing it himself.

CONTINENTAL HEALTH RESORTS.

Aix-la-Chapelle (Aachen).

Aix-la-Chapelle, as all Europe must know, is a climatic station of world-wide renown, beautifully situated on the west frontier of Germany near Holland and Belgium, and is the principal station on the railway from Cologne to Brussels, Paris, and London, as well as from Berlin via Dusseldorf to Belgium and France. It is also a stopping place for all express and corridor trains (trains de luxe) and a starting point for the trains running to Holland (via Maestricht), the Eifel and several branch lines. The soil on which this interesting city is built is for the most part composed of porous sand ("Aachen sand"), so that after heavy downpours of rain the streets and pathways are quite dry again in a very short time. A chain of beautiful hills (Aachen Woods) surround the entire valley in which this historic and health-restoring city lies. It is truly picturesque on all sides, a most pleasant and salubrious resort. Here are excellent hostels to suit all tastes and purses, English-speaking physicians of high medical renown, and baths unique in Europe. All the baths have comfortable hotels attached to them, so the visitors who live at the bath-houses can retire at once from their baths to their rooms (by lifts) without leaving the bath-house, and without exposing themselves to the risks of taking chills by crossing streets. Visitors can arrange to stay at most of the bath-houses "en pension," or otherwise, at very moderate prices. Those who are suffering from rheumatism, gout, paralysis, atrophy of the muscles, stiffness of the joints, skin diseases (particularly eczema), torpid affections of the liver, spleen, and any stomachic complaints, will find the Aix-la-Chapelle treatment (especially the douche) most efficacious, and in most cases a specific cure.

The Aix-la-Chapelle treatment combines usually drinking of the waters with the use of baths; as the plain bath, the douche and the vapour baths These baths are placed on the ground, through which the hot spring water runs. Consequently, however prolonged the bath treatment may be, no part of the bath-room can possibly become cool. The douche treatment here is especially effective and superior to any other on the Continent.

Y. M.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

GLASGOW.

Russian Delegates in Glasgow.

Following on the close of the International Congress of Medicine in London, the Russian delegates paid a visit to Glasgow, their aim being to visit the principal hospitals for the treatment of mental diseases. Included in the party were a number of lady physicians, and practically all the members are engaged in their own country in the special department of nervous and mental disorders. They were met at St. Enoch's Station by Dr. John Carswell, who escorted them to their quarters at the Grand Hotel. The series of visits were arranged to convey the delegates to the Royal Infirmary, the Eastern District Hospital which is under the supervision of Dr. Carswell, the new epileptic colony at Chryston, and Woodilee Asylum, including a luncheon given by the Corporation in the City Chambers. The second day's expedition consisted in a sail down the River Clyde from the Broomielaw, afterwards visiting Hawkhead Asylum, where they were entertained to luncheon. The following day a visit was made to Gartnavel Asylum and the university, after which the delegates proceeded to Edinburgh.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

A DOCTOR'S WIFE ON DRESS.

To the Editor of The Medical Press and Circular.

Sir,—"The regeneration of society is in the power of the woman, and she turns away from it. All future English generations might call her blessed, and she prefers to be called fashionable."—Stopford Brook.

I have been much interested in the correspondence on dress which has lately been published both in the *Times* and the Medical Press, but as one who has lived through many fashions from croquet and crinoline to tennis and tight skirts, I do not quite take the pessimistic view of the present style of dress set forth by some of the writers in both papers.

Personally I think that—ugly and immodest as the present fashion is when carried to extremes—it is no more a sign of the decadence of our race than was the crinoline of the 'sixties or the bustle of the 'eighties.

It has no deeper meaning than that the dressmakers set the fashion and those women who have no natural artistic taste blindly follow their lead. The tight skirt has held its sway a long while, probably because the dressmakers find it profitable owing to the very small amount of material it contains, but presently it will disappear and we shall perhaps return to the full skirt of early Victorian days.

From the hygienic point of view, however, the present style of dress seems entirely wrong, from the open neck devoid of any covering even with an outdoor coat to the gossamer silk stocking which is worn out of doors even in the coldest weather. The underclothing, also, is of the scantiest. Often the skirt is so tight that no petticoat of any sort is possible. Worst of all is the corset which compresses the hips and abdomen in order to give a tall and slim appearance to the figure, and is cut so long below the waist that it must hamper all free movement of the lower part of the body. A short time ago a saleswoman in the corset department of one of the large London drapers was heard to say to a customer regarding a particular kind of corset: "Of course, madam, these corsets are not for sitting down in."

It hardly seems possible that in these days when hygiene is taught to almost every child in the elementary schools there should still be women of the educated class foolish enough to wear corsets so long and tight that they are doomed to remain standing all the time they wear them. These corsets have one redeeming feature, however, for they do not, as a rule, compress the waist, and the upper part of the body is left quite free.

But on the whole even women's dress is not quite so senseless as it was in my young days, and children's clothing has altered entirely for the good except among the poorer class. In women's underclothing, some advance has been made, and the comfortable and hygienic combination garment introduced about thirty years ago has surely come to stay. So, too, let us hope, has that most useful of all feminine costumes, the coat and skirt, with its accompanying neat skirt or elegant blouse. I cannot think that this costume can ever go the way of other fashions. It seems essentially suited to the Englishwoman and is worn by, and looks well on, the wealthiest woman of fashion or the little maidservant on her weekly outing. It changes with the fashion as to length of coat and width of skirt, but never entirely disappears.

But the greatest reform has been in the clothing of our children. I still remember the miseries of the winters of my childhood, with frocks cut low in the neck and short in the sleeve, no woollen underclothing, or only the shortest of vests, with only white cotton stockings, calico drawers, and one or two loose, bulky petticoats to cover the lower part of the body. Added to these the all-essential crinoline, worn then by quite young children, which kept away from the body half the warmth the skirts might have given.

I quite envy the children of the present day with their warm combinations and knickers, their short skirts and blouses, or the still more modern and simple "djibbah." Unfortunately the children of the poor are not yet thus comfortably clothed and for the most part still wear the old-fashioned bulky garments. I feel that much might be done if only the "Schools for Mothers," heads of mother's meetings, etc., would take up this question of dress and teach the women how to make the better fashioned garments worn by our own children.

I agree with Stopford Brook that the regeneration of society is in the hands of the woman, and am hopeful enough to believe that she is no longer turning away from it, but that the future generations will indeed call her blessed, even though she still likes to be fashionable.

DOCTOR'S WIFE NO. 3.

August 16th.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—I have been vastly amused at the three letters on dress that have appeared in your last two issues. Your correspondents agree in disparaging the present fashion, but not one of them seems to know what she objects to. "A Doctor's Wife" complains that Englishwomen's dress to-day is "anti-hygienic, immodest, and indecent." It seems to me that the first epithet could be applied with greater propriety to any kind of women's clothes since the ancient Egyptians than to what we wear to-day. Only since the blessed advent of the short skirt can we stir outside the house without trailing clouds of dusty glory in our wake. As to the vague charges of indecency and immodesty, it is hard to know what "A Doctor's Wife" wants. She praises Frenchwomen for knowing "how to enhance what charms they may possess, how to veil defects of face or figure." I fail to understand on what grounds we are called indecent, unless it is for displaying our charms, a trait which, in our French sisters, is held up for our applause and imitation. "A Consultant's Wife" makes out no better case. She says the French tendency has always been the same, "the crinoline, the bustle, the pannier and no end of different forms of corsets to distort the form . . . and now we have the semi-nude." Does "Consultant's Wife" wish us to look as God made us, or not? She first complains of our figure being concealed and then of its being exposed, and apparently does not like either. What does she want? She really must make up her mind. It is hard to answer such contradictory objections, but I hope, sir, you will spare me space for my plea on behalf of clothes as they are. I am not a Victorian lady, but a woman of to-day. I play golf and go for long rides on my bicycle, and I appreciate our modern frocks. They are comfortable and clean. I no longer have to practise a sightly way of bunching up superfluous yards of stuff when I am out on a muddy afternoon, and putting my foot through tail braid is a thing of the past. Besides, a skirt that used to take four to six yards of material to make now only uses 2¼, and that allows a width of 1¾ yards, which is quite enough for freedom, and saves some extra shillings. As for modesty: After all, we are bipeds, and most people know it, so why should we try to copy the cylindrical uniformity of Mrs. Noah? And if we may show our necks in the evening, why must they always be hidden from the light of the sun? And surely no one wants us to go back to the steel corsets of our mothers. There is no immodesty in looking like a human being. Our dress to-day may show the soft lines of life, but they are better than the coarse curves of the *corsetière*. I apologise for trespassing so long on your valuable space, and, since it seems to be the fashion, but disclaiming all polygamous suggestion, beg to sign myself

DOCTOR'S WIFE NO. 4.

Dublin, August 14th.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—With reference to the correspondence on woman's dress, may I offer a suggestion which, if adopted, would settle the question once for all? There should be a regulation costume for women, with heavy penalties inflicted for any variation from the standard. This should be a combination suit—something like those worn by mechanics—made of a strong canvas in a drab, khaki, or other serviceable colour. The garments worn beneath this would be left to the taste of the wearer, so leaving scope for individuality. A short law to this effect would do more towards promoting Christian principles than much of the more pretentious legislation of to-day. One point further. I should like to emphasise. The garment must not button up at the back.—I am, etc.,

GYNÆCOLOGIST.

Liverpool, August 16th, 1913.

OBITUARY.

DR. F. M. MILLER.

WE regret to record the death of Dr. Frederick Montague Miller, J.P., M.R.C.S., L.R.C.P.Lond., L.S.A., which took place on the 15th inst., at his residence, "Elstead," Arden Road, Finchley, after a long illness, in his 66th year. The deceased, who qualified in 1864, was educated at the Merchant

Taylors' School and St. Thomas's Hospital. Settling in Amhurst Road, Stoke Newington, he soon built up a large and lucrative practice, ultimately moving to Clapton. For many years he enjoyed the confidence of a large number of patients, and at one time he was probably one of the best known practitioners in North London. By many he will be remembered on acount of his bedside manner, which was dogmatic and decisive to a degree, while by others his memory will be cherished as a preacher, for at one period of his life he exercised the dual calling of a minister and practitioner of medicine. In 1902 he was elected Mayor of Hackney, when he was in the zenith of his popularity, being re-elected to that office in 1906. He was Chairman of the Libraries Committee when Mr. Carnegie made a grant to the borough, when Princess Christian laid the foundation-stone of the Central Public Library, and when the King and Queen, then Prince and Princess of Wales, formally opened the building. He was passionately fond of horses, and his dashing turn-out was always regarded with something of envy by those qualified to judge. When, owing to failing health, he retired from active practice a few years ago, it was felt that a notable figure in the medical, municipal and social life of Clapton and Hackney had been removed. Latterly he had been confined to the house, and the end came at 4.30 on Friday afternoon last. Dr. Miller leaves a widow and two daughters to mourn his loss. To his bereaved family we beg to offer our respectful and sincere sympathy.

SPECIAL ARTICLE.

LEPROSY IN SOUTH AFRICA.

The South African Medical Record for May 24th and June 14th, 1913, is devoted to the subject of "Leprosy in South Africa." The first issue contains a paper of great interest by Dr. Robert Morrow on the history of the disease in South Africa up to the establishment of the first leper asylum, Hemel en Aarde. He discusses the subject in two periods—one prior to the arrival of the white man, and one subsequent thereto. The first mention of leprosy in South Africa is in the year 1756, but there are abundant signs that the disease itself has existed there from time immemorial, and that it cannot be regarded as a relatively recent importation. The author considers the commercial relations of South Africa in the past, and concludes that leprosy has existed along the east coast for centuries, that Mashonaland was a leprous country in the time of the gold-hunters, and that the disease was not less prevalent in the Great Zimbabwe than it is in any modern Asiatic city of equally large population.

Dr. Morrow shows that a study of the various Bantu tribes, together with facts bearing on leprosy in these tribes, indicates that the disease could not be visible to Europeans entering the Bantu territories for the first time, and that it existed in most of these tribes prior to the European entrance; also, in almost all tribes a recrudescence of leprosy followed in the track of the new civilisation, owing to the life of the leper being protected by the introduction of Christian teaching and European laws. In 1817 the leper asylum at Hemel en Aarde was established, and some temporary lazarettos erected in which lepers could be confined until they could be forwarded to the asylum.

The next paper in the journal deals with the administrative side of the leprosy question. The author, Dr. C. F. K. Murray, Official Visitor, Robben Island, discusses the subject at length, and suggests considerable modification in the present system of segregation. He advocates the establishment of leper settlements to admit of family life; the establishment of one or more central hospitals to which all the worst cases should be sent for treatment; and the modification of all existing establishments on this basis. With regard to Robben Island he advises the adoption of one of three courses: to remove the lepers to the mainland, or to remove the lunatics and convicts, leaving the island as a leper settlement, or to abandon the island as an official establishment altogether. A lengthy report by Dr. Bayon, research bacteriologist in leprosy, is appended. It deals with the advisability of segregation, with the prevention and cure of the disease, and with the suitability of Robben Island as a place of detention. The journal of June 14th is devoted to a paper of great value by Dr. Bayon on the recent experimental leprosy research. The author deals very fully with the attempts to cultivate the micro-organism of leprosy; he concludes that Kedrowsky's culture is one of true leprosy, capable of producing leprous lesions in animals, and reacting in a specific fashion with leper's serum. He states that the most suitable animals for inoculation are the rabbit, the rat and the mouse, and that the resulting lesions are similar to those caused by certain strains of human tubercle. According to Stanziale's and Serra's experiments the Wassermann reaction is positive in rabbits which have been successfully inoculated. With regard to the contagiousness of leprosy, the author believes that it is relatively easily communicable from the diseased to the healthy under unhygienic conditions by intimate personal contact. When, however, hygiene is good and contact not intimate one case in a thousand or even less may get infected. Dr. Bayon's paper is illustrated by many very beautiful coloured microphotographs of the bacilli of leprosy both in culture and in the tissues.

REVIEWS OF BOOKS.

DISEASES OF THE LIVER. (*a*)

This book puts within the reach of its readers a lucid, well-authenticated, and interesting account of the factors of liver disease, and its historical character is vouched for by its evident dependence upon many original sources and prime authorities, although this is not pushed to the exclusion of diverse views, and an excellent compendium of reference to other works appears on nearly every page. A chapter taken as an illustration of the merits of the book, and which is most likely to be met with by every member of the profession is the article on cirrhosis of the liver, in which the author commences by giving a list of the various ways in which this disease has been classified, and finally prefers to divide the disease into one of two kinds—viz., the ordinary, portal or common cirrhosis, and that of biliary cirrhosis. This is followed by an historical review, the ætiology of the condition, and, later, its pathology and morbid anatomy. The clinical part of the disease needs special mention, and the treatment is all that could be desired. Dr. Rolleston goes into detail when necessary and works on a broad canvas, dealing not only with events and facts, but also with questions of numbers and statistics of the physician in his widely scattered medical fields. The book has all the merits desiderated in a work of its kind, including clearness of arrangement, accuracy of statements, and facility of reference, and the coloured plates, photomicrographs and figures are well produced. It is a well-written and interesting work on a fascinating subject.

DISEASES OF CHILDREN. (*b*)

From year to year the field of knowledge of the diseases of children is widening, and along certain lines considerable advances are continually being made, so that in this, as in other subjects, it becomes a matter of increasing difficulty for an individual to cope with the mass of new material and to formulate accurate conceptions of the value of the results of recent researches. The reader needs not only a comprehensive and authoritative text-book which he can study, but also a book of ready reference in which the rarer varieties of disease receive adequate notice. In the present volume every endeavour has been made that the work shall be concise and of practical value

---

(*a*) "Diseases of the Liver, Gall-Bladder and Bile Ducts." By Humphry Davy Rolleston, M.D. Second Edition. London: Macmillan and Co., Ltd. 1913.

(*b*) "Diseases of Children." By various Authors. Edited by Archibald E. Garrod, D.M., M.A., F.R.C.P., F.R.S., Frederick E. Batten, M.D., M.A., F.R.C.P., and Hugh Thursfield, D.M., M.A., F.R.C.P. Fully illustrated. Pp. 1,184, with Index. London: Edward Arnold. 1913. Price 30s. net.

to the physician, special attention being devoted to the pathology, symptomatology, prognosis and treatment of each disease. It is therefore with the greatest pleasure that we welcome the publication of this important work by various authors. The names of the editor are sufficient guarantee of the thoroughness with which the volume has been produced, and they have been fortunate in securing the collaboration of many well-known and recognised authorities on various special branches of children's diseases. On this account the value of the work is considerably enhanced, and this wealth of special knowledge has been set forth with a completeness which the editors believe has not hitherto been attempted in this country. With this claim we feel that those who have a large experience of pædiatric literature will be disposed to agree. In a large volume of this kind there are naturally many points which are open to discussion and possibly to criticism, but where all the subject matter is of such a high standard and bears unmistakable evidences of careful and judicious selection it would be uncalled for to take exception to particular passages. While avoiding prolonged discussion of controversial and disputed problems, the editors have sought to obtain authoritative statements of various questions in dispute with a judicial summing-up of the arguments, such as would at once put the reader in possession of the known facts, and be of practical help to him. The contents are divided into four prolegomena, followed by twenty-three chapters and an excellent index. Heredity and Immunity receive due notice at the hands respectively of Dr. Gossage and Dr. Thursfield. Dr. Garrod contributes three articles which are among the most interesting in the whole book on diseases of the ductless glands, disorders of metabolism, together with an introductory survey of disease as it affects children. Dr. Poynton's chapter on cardio-vascular disease is clear and concise, rheumatic heart disease being considered in detail, since this is the form most frequently met with. Diseases of the skin are dealt with in Dr. Adamson's contribution, which gives useful indications for diagnosis and treatment. Dr. Voelcker writes in interesting fashion of rheumatism and chorea, the latter of which he defines as "a rheumatic affection of the central nervous system," which view is in accordance with the opinions held by most of those who have worked at London hospitals. On a systematic survey of the whole treatise, we find that no essential feature of the diseases of infancy and childhood has been overlooked, and at the same time the attention of the reader is kept from wandering, and salient points in various conditions are further emphasised by an abundance of photographic reproductions of actual cases and of line diagrams and charts. Finally, from every point of view, we can assert with conviction that this work fills a hitherto-existing gap in our British literature of children's diseases, and is well worthy of a place on the library shelf of every medical reader who is in any way concerned with this subject.

IONIC MEDICATION. (*a*)

The subject of "ionic medication" is one which will, very probably, furnish the stimulus to a great deal of clinical research in the near future, and the inspiring text to many contributions to many of our medical journals. Our author defines this, his chosen subject of inquiry, as "a method of treatment in which electric currents are used for their power of setting the constituents of a saline solution in orderly motion in a definite direction." The idea of utilising the weird powers of electricity for the treatment of the physical ills of the human frame is (necessarily) an old one; the disappointing results obtained from all the venerable "simples" in turn, kept the suffering descendants of Adam always on the look-out for a panacea—the representative symbol in the physical world of the powers and gifts of a Messiah in the theological. Thus every notable discovery of an element, metallic or metalloid, solid, fluid or gaseous, was soon followed by experimental investigation of the effects of application of the same to the afflicted human organism. Disappointment has been the more frequent result; but we can well afford to encourage perseverance in investigation, having regard to the vastness of the reservoir of clinical and physical and physiological facts which has been gradually filled by the fruits of the laborious harvest. Our author gives a good account of the present position of the ion in the scientific field of vision; and his description of the clinical adaptation of its properties is readable and precise to a praiseworthy degree. As the subject is still in its relative infancy, the collected evidence is, necessarily, in large proportion secondhand. It is not, sooth to say, calculated to make us more confident or more hopeful than we were before—but such is the doom of the elderly examiner of the items for therapeutic confirmation, who has long and laboriously studied his subject. A good testing instance, we believe, is offered by the interesting item, lupus. And of it we learn: "This form of specific ulceration would naturally appear to be a very suitable condition for treatment by ions; and so it is, but it is by no means easy to obtain a permanently good result. This may be due in part to the peculiar fatty or waxy nature of the tubercle bacillus, which tends to render it a non-conductor of electricity." That wretched bacillus! Of course, we anticipated that the fault of incompletion would be laid at its door! And so it shall evermore be, till the practitioner begins to neglect the presence of the bacillus, and concentrate his attention on the personality of his patient and the defects of the same inherent or acquired.

NOTES ON THE TREATMENT OF TUBERCULOSIS (*a*)

In this little book the author urges the importance of lime salts in the treatment of tuberculosis, believing that Nature's method of cure in that disease is mainly the calcification of tubercle, combined with the development of fibrous tissue in abundance for the purpose of surrounding and thus cutting off the diseased from the healthy part. Dr. Laird gives the ingredients of a special mixture, the persistent use of which has yielded good results in his hands, containing the iodide and benzoate of sodium, arsenic, the tinctures of pulsatilla and baptisia, suitably flavoured. Reasoning from a large number of authorities quoted and all the facts stated, together with his own experience, the author concludes that tuberculosis is a preventable disease, and that the best means at our disposal for its prevention lies in our keeping up to full efficiency the calcium contents of the system in infancy, childhood and adolescence.

SYMPTOMS. (*b*)

We are not surprised that the popularity of Dr. Mackenzie's work has called for this second edition, and we are glad to think that he has increased the obligation under which he has placed the profession by the way he has responded. It is some time since we have read a more suggestive book, and suggestiveness is one of the most desirable qualities in any medical work. Whether the views put forward by the author prove to be correct or not time and patient research alone can tell, but whatever may be the outcome of this research there can be no doubt that the seekers will be benefited. We have been so long accustomed to associate pain directly with the diseased or injured viscera that it is difficult to divest our minds of the habitual idea that the pain is in the viscus, yet how often does this idea lead us astray. Dr. Mackenzie has opened for us a new field for investigation, a field, too, which is to be explored by the clinician, and for the exploration of which he does not require the costly armamenta of the scientific laboratory. We feel sure that clinicians will gladly seize the opportunity thus offered to them, and we can heartily recommend to them the excellent guide that Dr. Mackenzie has prepared.

(*a*) "Ionic Medication: The Principles of the Method and an Account of the Clinical Results obtained." By H. Lewis Jones, M.D., F.R.C.P., Consulting Medical Officer to the Electrical Department in St. Bartholomew's Hospital, etc. London: H. K. Lewis. 1913.

(*a*) "Notes on the Treatment of Tuberculosis (Preventive and Curative)." By John Laird, L.R.C.P. and S.I. Pp. 85. Bristol: John Wright and Sons, Ltd. 1912. Price 2s. 6d. net.

(*b*) "Symptoms and their Interpretation. By James Mackenzie, M.D. Second Edition. 8vo., pp. XX. and 304. London: Shaw and Sons. 1912. Price 7s. 6d. net.

MEDICAL NEWS & PASS LISTS.

The Highland and Islands Medical Service.

It is announced that the names of those who are to constitute the Board to administer the Highlands and Islands Medical Service Act are as follows:—Sir John Dewar, chairman; Sir Donald MacAlister, Principal of the University of Glasgow; Lady Susan Gilmour, honorary secretary of the Queen Victoria Jubilee Institute for Nurses; Dr. McVail, of the Scotish Insurance Commission; Dr. Leslie Mackenzie, of the Local Government Board; Dr. John Macpherson, of the Lunacy Board; Mr. J. L. Robertson, Chief Inspector under the Scotch Education Department.

The Sale of Patent Medicines.

The Select Committee appointed to consider and inquire into the question of the sale of patent and proprietary medicines, medical preparations and appliances, and advertisements relating thereto, report that "as it will not be in their power to make a full report in the present Session, they have agreed to recommend that a Committee on the same subject be appointed in the next Session of Parliament."

County Sanatoria for Tuberculosis.

The Kent County Council have decided to build a central sanatorium for Kent for the treatment of tuberculosis. Provision will be made for 100 beds, and the capital expenditure which will fall upon the council will amount to £6,000. The original proposal was to erect more than one building with provision for a total of 205 beds.

The Cornwall County Council decided last week to apply to the Local Government Board for power to borrow £3,000 for the purpose of providing a sanatorium for tuberculosis patients under the National Insurance Act. Mr. R. G. Rows, Chairman of the Finance Committee, explained that it was proposed to purchase the Watergate Bay Hotel, two and a half miles from Newquay, and convert it into a sanatorium. Assuming that the cost was £7,500, the Local Government Board would provide three-fifths, or £4,500, and the county two-fifths, or £3,000. The hotel would provide accommodation for 60 beds at least, and he believed it would be one of the finest establishments in England.

Extermination of the Common House Fly.

A vigorous campaign is being waged in America against the house fly, and enormous numbers of the winged pests are being destroyed daily. The Board of Health have circulated instructions telling the public how to "swat the fly," and public opinion is everywhere being aroused with the object of stimulating the work of extermination.

Educational work amongst children is being conducted, and in many schools cinematograph pictures are being shown of the fly's wanderings from the garbage heap where typhoid lurks to the family's roast joint on which he is shown wiping his feet realistically. Greater interest also is being taken in matters affecting public health, and people are beginning to realise the disease-breeding character of the domestic house fly, especially in the dissemination of infantile diarrhœa and other infectious diseases. A solution of Jeyes' Fluid is freely sprayed in dark corners, crevices, etc., where flies breed, the larvæ are destroyed before they develop into flies. All manure heaps are disinfected with the fluid, and sinks, drains, lavatories, etc., are cleansed every day with water containing this disinfectant.

Middlesex Hospital Medical School.

The following scholarships, prizes, and certificates have been awarded during the sessions 1912-1913 at the Middlesex Hospital Medical School:—

Lyell Medal and Scholarship, A. O. Gray; John Murray Medal and Scholarship, F. W. Browne; Hetley Clinical Prize, A. O. Gray; Leopold Hudson Prize, H. A. Lucas; New Zealand Scholarship, T. Julian; Second Year's Exhibition, D. W. J. Andrews.

Medicine—prize, F. E. Feilden. Surgery—prize, F. E. Feilden; certificate, T. C. Kidner. Practical Medicine—prize, F. E. Feilden; certificates, S. W. M. Jones, B. M. Mitra, and B. H. Singh. Practical Surgery—prize, C. P. Sells; certificates, B. M. Mitra and F. E. Feilden. Practical Midwifery—prize, O. C. Link. Pathology—prize, T. C. Kidner; certificate, B. H. Singh. Psychiatry—prize, H. C. Samuel; certificate, C. J. B. Way. Pharmacology—prize, E. H. Lake; certificate, F. C. Mason. Anatomy—prize, D. W. J. Andrews; certificates, V. H. Dye, H. De Morgan, D. C. Ogilvie, and W. L. Thomas. Physiology—prize, D. W. J. Andrews; certificate, D. C. Ogilvie. Practical Anatomy—prize, D. C. Ogilvie; certificates, J. Fox Russell and C. J. L. Wells. Histology—prize, E. H. Lake; certificates, F. C. Mason and W. B. Gabriel. Embryology—prize, W. T. Warwick; certificate, F. C. Mason. Practical Pharmacy—prize, L. G. Lunnon; certificates, H. C. Samuel and R. F. S. Mason. Biology—prize, G. Howorth; certificates, C. Shelton, L. G. Lunnon, and A. K. Ince Jones. Organic Chemistry—prize, F. C. Mason; certificates, E. H. Lake, A. Selby Green, and W. B. Gabriel. Inorganic Chemistry—prize, M. B. Tench; certificates, A. I. Cox and J. J. Chiappa. Physics—prize, A. I. Cox; certificates, M. B. Tench and A. G. Hewer.

Surgical Appointments at the London Temperance Hospital.

The rearrangement on the surgical side at the London Temperance Hospital has been made, and Mr. W. McAdam Eccles, M.S.Lond., F.R.C.S.Eng., Mr. H. J. Paterson, M.C.Cantab., F.R.C.S.Eng., and Mr. Arthur Evans, M.S.Lond., F.R.C.S.Eng., have been appointed surgeons, and Mr. James McClure, M.B., F.R.C.S., surgeon to out-patients.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. Leith Murray.—We have written to our French correspondent for the desired reference.

CHEAP SUMMER EXCURSIONS FOR MEDICAL MEN.

We are asked to announce that the last of the cheap summer excursions to the Health Resorts of the Continent, inaugurated this year by the Paris, Lyons and Mediterranean Railway, will leave London for Auvergne, Dauphiny, Savoy, Provence and Corsica, on August 30th, particulars of which can be had on application to the London office of the railway company.

Sportsman.—Doubtless, there is much to be said on your side of the subject, but it is hardly one to which we can open our columns.

CONTINUOUS NIGHT AND DAY SERVICE OF MEDICINE.

We are asked to announce that the West End depot of Messrs. Burroughs, Wellcome and Co. has been transferred from Messrs. Munro and Co., Regent Street, to Messrs. John Bell and Croyden, Ltd., 50 Wigmore Street, London, W. This depot will maintain a continuous day and night service and hold a complete stock, so that it will be possible to obtain supplies at any hour, even when Messrs. Burroughs, Wellcome and Co.'s warehouses are closed.

J. H. Selby should get the last edition of Drs. Castellani and Chalmers' "Manual of Tropical Medicine," which contains the latest researches on the subject of those eminent authorities.

Dr. T. J. Brooke-Kelly (Queensland).—Your paper on "The Surgical Treatment of Gastro-Intestinal Stasis" to hand, and is marked for early insertion.

THE TRANSACTIONS OF THE CONGRESS.

Each member of the Congress will receive a copy of the transactions of the Section to which he belonged, but it has been arranged to supply the complete set of the Congress transactions for a subscription price of £4. Applications should be addressed to the publishers, Messrs. Frowde, Hodder, and Stoughton, Oxford Press Warehouse, Falcon Square, London, E.C.

M.B.Oxon (London, N.).—It seems pretty well established that, in spite of all recent advances in synthetic chemistry, the only two drugs that possess a *specific* action in ophthalmic therapeutics are silver nitrate, a specific for the gonococcus, and zinc sulphate, which is specific for the Morax-Axenfeldt bacillus

Dr. W. B. (Beds).—The symptoms are very suggestive of ptomaine-poisoning, but it is necessary to use the utmost circumspection before attempting to incriminate the products of any particular tradesman.

THE NATHANIEL ALCOCK MEMORIAL FUND.

We understand that an appeal is being made to the friends of the late Professor Nathaniel Alcock to contribute to a fund for the benefit of his widow and four children. Owing to his untimely death and the moderate remuneration that generally falls to the lot of the scientific worker his family has been left wholly unprovided for. Contributions will be gratefully received and acknowledged by Professor E. H. Starling, Physiological Institute, University College, London, W.C.; or Professor A. D. Waller, Physiological Laboratory, London University, South Kensington, London, S.W. Cheques should be drawn to the order of Professor E. H. Starling or Professor A. D. Waller, and crossed "Alcock Memorial Fund."

P. W. R. (Brighton).—According to the views of Mr. E. M. Holmes, F.L.S., the myrrh of Scripture is not identical with that used in medicine, the former referring to perfumed myrrh, the product of *Commiphora erythraea*

F.R.C.S.Edin. (Berks).—It has only been recently reported that Prof. Townsend, of Lima, has discovered that verruga is transmitted by small blood-sucking midge of the genus Phlebotemus, which is widely distributed in tropical or sub-tropical regions.

Dr. A. T. (London, N.W.).—Fowler's solution was introduced into the British Pharmacopœia by Tom Fowler, an apothecary in Yorkshire.

MOSQUITOES IN EPPING FOREST.

In view of the danger to health caused by the large and increasing number of mosquitoes infesting Epping Forest, the Chingford Urban Council have called a conference of all the local authorities within the Epping Forest district to consider steps to abate the pest. Dr. Stanbury Brook, medical officer to the Chingford Council, recommends that where possible fish should be cultivated in the forest ponds to destroy larvæ, and states that the best way to attack the mature insect is to breed bats.

Dr. Alexander (Edinburgh).—Proofs of your paper will reach you this week.

L. S. R. (Halifax).—Is thanked, but the material is only remotely of interest to the readers of this journal.

Appointments.

Bride, T. Milnes, M.D.Vict., Hon. Ophthalmic Surgeon to the Northern Hospitals for Incurables, Manchester.

Hellier, John B., M.D.Lond., an Examiner in Midwifery and Diseases of Women to the Royal College of Physicians of London.

O'Brien M. A. A., L.R.C.P. and S.I., Certifying Surgeon under the Factory and Workshop Acts for the Fermoy District of the county of Cork.

O'Kelly, T., M.D., R.U.I., has been appointed Certifying Surgeon under the Factory and Workshop Acts for the Chipping Norton District of the county of Oxford.

Vacancies.

County of Lanark, District of the Lower Ward.—Tuberculosis Officer and Assistant Medical Officer of Health. Salary £300 per annum. District of the Middle Ward. Tuberculosis Officers and Assistant Medical Officers of Health (two). Salary £300 per annum. Applications to the District Clerk at Hamilton.

Preston County Asylum, Whittingham, Lancs.—Assistant Medical Officer, unmarried. Salary £200 per annum, with board, apartments, and washing. Applications to the Medical Superintendent.

Rainhill, near Liverpool, County Asylum.—Assistant Medical Officer, unmarried. Salary £200 per annum, with apartments, board, attendance, etc. Applications to the Medical Superintendent.

Gloucestershire County Council and Gloucester Corporation Joint Committee.—Tuberculosis Medical Officer. Salary £500 per annum. Applications to the County Medical Officer.

Durham County Sanatorium.—Medical Superintendent. Salary £400 per annum, with quarters and board. Applications to the County Medical Officer, Shire Hall, Durham.

Durham County Council.—Assistant Tuberculosis Medical Officer. Salary £300 per annum. Applications to the County Medical Officer, Shire Hall, Durham.

Birmingham General Dispensary.—Resident Medical Officer, unmarried. Salary £220 per annum, with apartments, fire, light, and attendance. Applications to the Secretary.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Aberfeldy (Perth), Boston (Lincolnshire), Glenavy (Co. Antrim), Pewsey (Wiltshire).

Berkshire Education Committee.—Assistant Medical Inspector of Schools. Salary £300 per annum. Applications to W. F.

Marriages.

Geikie Cobb—De Poix.—On August 12th, at St Edmund's, Bungay, Ivo Geikie Cobb, M.D., to Audrey, only daughter of Edmond Tyrel de Poix, J.P., and Mrs. de Poix, of Broome Place, Norfolk.

Grece—Maybury.—On August 14th, at the Parish Church, Frimley, Surrey, George Lewis Fitz-Clair, elder son of the late Clair James Grece, LL.D., Town Clerk of Reigate, Surrey, to Clara Maud, only daughter of Horace Mansell Maybury, M.D., of Islington, and grand-daughter of the late William Augustus Maybury, M.R.C.S.E., of Cedar Lodge, Frimley.

Loring—Cahill.—On August 16th, at Holy Trinity, Sloane Street, Norman Henry Loring, of 36a, New Cavendish Street, W., to Lucy Lilian, elder daughter of John Cahill, M.D., F.R.C.S., of 12 Seville Street, Lowndes Square, S.W.

MacNish—Wilson.—On August 11th, at All Souls, Langham Place, London, W., by the Rev. W. F. Scott, David MacNish, M.A., M.B., of Harley Street, W., to Margaret, widow of Herbert W. Wilson, of Liverpool.

Deaths.

Browne.—On August 12th, at Landour, Arthur Herbert Browne, M.B., C.M.Glasg., C.M.S., Medical Missionary at Amritsar, Punjab, from septicæmia.

Cran.—On August 12th, at Townfield House, Church Street, Great Harwood, Lancs, James Cran, M.B., C.M.Aberd., aged 57.

Cuthbertson.—On August 12th, at 22 Park Terrace, Stirling, David Cuthbertson, M.D.Edin., L.F.P.S.Glasg., aged 73.

Eastwood.—On August 11th, at Darlington, Lewis Eastwood, J.P., L.R.C.P. and S.Edin., L.S.A.

Makins.—On August 13th, at a nursing home at Blackpool, of acute pneumonia, Richard Makins, M.D.Glas., aged 35.

Miller.—On August 15th, at Elstead, Arden Road, Finchley, Frederick Montague Miller, M.R.C.S., L.R.C.P., late of Northolme, Upper Clapton, aged 65.

Noke.—On August 12th, at Northampton, Frank Herbert Noke, M.B., D.P.H., late Captain R.A.M.C., younger and only surviving son of the late Edward Noke, of 13 Springfield Place, Bath, aged 35.

Patterson.—On August 11th, at Constantinople, after a short illness, John Patterson, M.D., Mar. Coll. Aberd., L.R.C.S.Edin., aged 79.

Pritchard.—On August 11th, at 38 Nevern Square, Kensington, Dorothea Emily, daughter of W. G. Pritchard, M.D., Inspector of Hospitals, Madras.

Richardson.—On August 13th, at Aboukir, Warden Road, Totland, John Richardson, M.A., M.B., K.H.P., Surgeon-Colonel Indian Medical Service (retired), of Glenhurst, Fountain Road, Norwood, aged 76.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, AUGUST 27, 1913. No. 9.

NOTES AND COMMENTS.

The Control of Venereal Disease.

It is opportune that a special report upon venereal diseases by Dr. R. W. Johnstone should have been recently issued by the Local Government Board dealing with the essential remedies for their control. Public attention has already been directed to the subject through the discussion thereupon at the International Medical Congress, followed by the announcement of the appointment of a Government inquiry. It is pointed out that in the adult the influence of syphilis upon the public health cannot be measured by the official returns of certified deaths, which are well known to include only a portion of those even directly traceable to it. But even if the death-rate from syphilis and from diseases definitely ascertained to be of syphilitic origin could be ascertained and relied upon, the result would only represent a part of the damage caused to the public health by this disease. A most important section of Dr. Johnstone's report deals with the question of hospital and infirmary accommodation for sufferers from venereal diseases, which, unfortunately, is lamentably deficient. The poor syphilitic is not infrequently refused admission into hospitals sometimes because of some ancient by-law which would deny him the privilege of in-patient treatment. The sooner such a ridiculous prohibition is removed the better it will be for the public health. Greater facilities for the study and treatment of syphilis and gonorrhœa are urgently needed, and it is to be hoped, considering their national importance, that these affections may before long be earnestly grappled with by adequate legislative and administrative measures.

Sanatoriophobia.

From various parts of the country correspondents have written to several of the daily papers suggesting that the erection of sanatoria for consumptives at health resorts should not be allowed on the ground that tuberculous disease might be spread thereby. The idea that tuberculosis is an air-borne disease has no foundation in fact, for one has only to turn to the mortality statistics of places like Bournemouth or Nayland to see that the death-rate, instead of rising after a sanatorium has been established, has materially decreased. The sight of a large building with perpetually open windows does not scare the inhabitants of a place unduly, nor inspire the beholders with fear and dread of catching some disease. As the Mayor of Bournemouth has aptly expressed it: "The existence of these people congregated together does not affect the outside public. As to having a deterrent effect on residents or visitors coming to the town, I am of opinion that such effect is a practically negligible quantity. The establishment of sanatoria in Bournemouth has not adversely affected the town in any way. Bournemouth has always been regarded as a great health resort for chest complaints, and people of the district do not appear to think sanatoria are places to be avoided." It must be admitted that the popularity of Bournemouth or of Ventnor as health resorts has not suffered in the least degree in consequence of the presence of these buildings, nor can the view be upheld that their establishment would ruin a popular watering place. A mere sentimental objection to the presence of a sanatorium cannot be allowed to stand in the way of its erection in any suitable neighbourhood, whether this be thickly populated or not.

Coffin-Shaped Tablets.

There is much to be said in favour of placing poisonous lotions, liniments, etc., in bottles that are specifically different in shape from an ordinary medicine bottle. The appeal thus made to the senses of sight and touch is an extra precaution against fatal mistakes, especially where medicine is groped for in the dark, or in the case of semi-intoxicated or very ignorant persons. In spite of every care, however, disasters occasionally arise owing to gross neglect of the simplest precautions. It is reported that an American chemist has adopted the somewhat ingenious, if gruesome, device of making up dangerous drugs in coffin-shaped tablets, so as to impress patients with the peril of mistaking them for lozenges or sweetmeats. In the case of corrosive sublimate, for instance, there might be some sense in dispensing tablets of such a dangerous substance in such a sensational manner, but the difficulty of rendering the resulting solution, when dissolved in water, sufficiently distinctive as well would still remain. Besides, the shock to a sensitive patient in being confronted with an emblem of decease, even in miniature, might prove too much for his nerves, especially if the suggestion were adopted to stamp one side of the tablet with a skull and cross-bones. The dispensing and storing of poisonous solids as well as liquids can be carried out with safety if bottles of a distinctive shape and colour are employed.

Travelling Health Museums.

Some seven years ago an International Association of Medical Museums was founded with the object of developing the functions of the medical museum as a factor in medical education. The second triennial meeting of this association was held in London at the beginning of the present month, under the presidency of Professor A. S. Warthin, of the University of Michigan, who explained that the scope of the association really extended beyond pathology into every field of medical practice, more especially in the direction of preventive medicine and hygiene. There can be no doubt that there exists at the present day in our own country an increasing demand for medical museums upon a popular basis. The *rôle* of the travelling health museum, such as has been successfully employed in the campaign against tuberculosis, is more than merely educative; it awakens the public to a real sense of responsibility in connection with the presence of an infective disease in their midst. Judiciously staffed there is no reason why properly-equipped health museums of the caravan type should not be more generally used up and down the country to illustrate, for instance, the ravages of venereal as well as other diseases, for in this manner the claims of preventive medicine can be laid simply and convincingly before a large section of the public which it would be difficult to reach by other means.

LEADING ARTICLES.

THE MEDICAL PROFESSION AND TRADE UNIONISM.

THE recent decision at Brighton of the British Medical Association representatives against the proposal to form a professional trades' union demands careful consideration by medical men throughout the Kingdom. It cannot, of course, be regarded as final, for even if the rules of the Association do not permit the reference of a negative resolution of the kind to the final decision of members generally, the matter must infallibly be brought forward again. Under these circumstances it may be well to examine the position a little more closely, in order to see what is involved in the acceptance as well as in the rejection of the proposal. One of the main facts, so far as the Association is concerned, is probably that which enables a friendly society to trade upon a defined basis of profit and to further its particular objects by fighting legal actions bearing upon their collective interests. Among other financial considerations is the power of spending money in election expenses and maintenance of members of Parliament—a power that has been of supreme interest to the formation of the Labour party in the House of Commons. It would undoubtedly prove of incalculable value if the medical profession were similarly represented in the legislature. Many other of the statutory powers and privileges possessed by the friendly societies are already more or less completely in the hands of the British Medical Association. Take, for instance, the power of collective bargaining which is one of the chief weapons of the societies. That is possessed by the Association, as shown emphatically in the negotiations with the Government over the Insurance Act during the past few years. It is true that the weapon of the strike, which labour uses freely in its unceasing struggle against capital, is not, under present conditions, in the hands of Association members. As a matter of fact, the reason for its absence does not lie in the rules of the Association, but rather in the fact that medical men have not educated themselves to a recognition of the need of absolute self-effacement and loyalty to certain definite lines of collective policy. So long as workmen were a mere mass of isolated individuals they remained powerless and inarticulate; but by virtue of their friendly societies and trade unions they have rendered themselves a great and increasing power in the State. As a matter of fact, the British Medical Association appears to be to all practical intents and purposes already a trade union, and to describe it alternatively as a "voluntary Association" is a somewhat fine-spun distinction. The general sentiment underlying the representatives' rejection of the trade union proposal is that such a change would lower the status of the medical profession. It is somewhat difficult, however, to see that the medical dignity would suffer more than it did when the Association virtually declared a strike, although it was not carried out by members, who flocked to the panels at the close of 1912, in direct contravention of directions from headquarters and even of the pledges of members themselves. Nor can the attitude of the Association towards outside medical men be altogether regarded as that of an ordinary voluntary association; in some ways, indeed, it reflects the methods adopted by trade unions against non-members. In short, the parallel between the Association and the trade union is exact enough to prompt the average lay journalist to ask with his usual directness why a spade should not be called a spade. The answer to that question lies with medical men. If it can be shown that in trade unionism there is some undignified or coercive principle irreconcilable with the best traditions of the profession, there is in that case no need to make any change in the present arrangements. If, on the hand, the principles and practice of trade unionism, formally adopted *en bloc*, would strengthen the hands of a profession that is admittedly in need of advancement and succour, then it were mere weakness to ignore palpable facts and to decline a change of the kind on grounds that are mainly sentimental.

MYOPIA IN SCHOOLS.

UNDER the educational pressure in the elementary schools at the present time, the question of the prevalence of myopia among the children is becoming increasingly important. It was, therefore, timely to have introduced a discussion upon the subject at the International Medical Congress. A paper was read by Dr. James Kerr, of London, in the section of Hygiene and Preventive Medicine, upon the "causes, prevention, and treatment of visual defects in school children," which mainly dealt with myopia. This paper was followed by a long and interesting discussion, in the course of which many views were expressed, showing the cosmopolitan recognition of an evil which calls for repressive measures. There was one point upon which agreement seemed to be general, namely, that of the sex difference which existed in respect to the prevalence of myopia. Myopia, it was generally affirmed, was more common among girls than among boys, and the difference in regard thereto was attributed to the greater strain upon the near vision, such as that caused by needlework, which girls are required to undergo. It may be conceded that there is undoubtedly some truth in this, and there is reason in the supposition that whatever implies a greater strain upon the near vision, during the educational period, will increase the tendency to myopia. We must, however, at the same time recollect that myopia is a very complex subject. In its causation many factors are concerned, and in all probability the primary dominating influence associated with its development is an inherited tendency to the defect. Congenital myopia is almost unknown; the natural condition of the eyes at birth being hypermetropic. But myopia may be met with in children even before the school age has been reached. In these cases, as in others in which the defect develops early in life, the history is obtainable of shortsightedness in one or both parents—thus, under these circumstances, whatever the conditions may be under which a child is called upon to pursue the educational course, myopia will follow as an unavoidable result. Prevention, therefore, seems impossible of attainment, even under the most rigid precautions—in short, a child inheriting a pronounced tendency to myopia will become myopic merely by the ordinary use of the eyes in its daily life. Again, myopia is more commonly prevalent among girls, inasmuch as the inherited tendency seems to be transmitted to them in higher ratio than among boys. Undoubtedly, however, the influence of preventive measures, even in cases of a pronounced hereditary history, is salutary and useful. Although prevention may not be possible, there still remains the fact that to a large extent the defect can be kept under control by the constant use of the correcting lenses, and the avoidance of those causative influences which are known to be harmful. Myopes, however, in the first place require to be protected against themselves. Almost without exception they display an inveterate habit of using their eyes injuriously. They are always great readers; this pastime seems always to them to be irresistible; the question of suitable opportunities for doing so does not concern them—often they will be found poring over a book, aided by a light no greater than that emitted by the flickering flame of a fire—and yet it is a platitude to repeat that a good, sound light is as necessary for the near work of a myope as is wholesome air for the re-oxygenation of our blood. Parental restriction, therefore, should always be directed against this reprehensible habit of myopic children; and the children warned against the harmfulness of persisting in the practice of it. After the necessary correction of the defect with glasses, and the provision of a good light, comes the question of the size of the type employed in school books. The reading matter should, of course, be printed in clear type of a size which causes no strain to the children's eyes. Many educational books are printed in too small a type: in daylight this type might be sufficient for the purpose, but in the latter months of the year much of the teaching is done with the aid of artificial light, under the circumstances of which small type school books are undoubtedly harmful, by causing an unnecessary strain to the eyes. This matter has not hitherto received the attention its importance demands, either in regard to the school books of the elementary schools or those of private schools. A point raised by one of the speakers in the discussion invites some criticism. He expressed his abhorrence of the home evening preparation system, and claimed that it should be abolished. He also affirmed that in the winter months, from November till February, no class work should be done by artificial light. These suggestions seem to imply a passing from the sublime to the ridiculous. If these were to become educational laws, a large proportion of the educational life of the children would be lost—and wasted. Nothing is perfect in this world, nor is our education system perfect; but to attempt to legislate for that system in the manner suggested is equivalent to destroying the foundation upon which it rests. Neither the interests of the children nor of their parents would be advanced by a change so iconoclastic in origin.

CURRENT TOPICS.

The Dangers of Dust Heaps.

The complexity of infections associated with dust heaps, and the loathsomeness of their decomposition effects, constitute a menace to the public health wherever they exist. A noticeable concrete example of this has just been furnished by Dr. Bruce, medical superintendent of the Southwark Infirmary. During the past few weeks an outbreak of enteritis occurred in the infirmary among eighteen children, of whom four died, and the cause of the disease was directly attributed to the laden trucks of dust refuse on a railway siding adjoining the infirmary. This dust refuse was, under the authority of the Camberwell Borough Council, being removed by the contractors. The nuisance had already been made the subject of frequent complaint by the Southwark Board of Guardians, but hitherto no attention had been paid to their protestations, with the result that four children have now lost their lives. It would seem as though the members of the Camberwell Borough Council are immune from the ordinary dictates of humanity. Why should any arrangements they choose to make for the removal of the borough refuse, albeit detrimental to the health of an adjoining parish, concern them? This would seem to be their process of reasoning, ignoring the fact that they are no more entitled to poison their neighbours than their neighbours would be entitled to poison them. Obviously the persistent neglect to abate the nuisance can be in no way justified. The preservation of the public health in one parish is just as important as its preservation in another, and anything which detracts from that necessary consummation must be strenuously dealt with, not only in the interests of the parish concerned, but in those of the community as a whole. The matter, we learn, is now to be submitted to the Local Government Board with a view to compelling the Camberwell Borough Council to do their plain duty, failing this legal proceedings will be taken, the costs of which the ratepayers of Camberwell will doubtless be called upon to pay. And so it is that public money is ruthlessly wasted.

Spitting.

Shakespeare tells us that "orators when out will spit." He understates the case unless there is something in the spirit of the British workingman that bids him rival Demosthenes, and makes him treat an atypical *trait* as a specific sign of rhetorical ability. Anyway, street-corner politicians and house-supporters spit strenuously. Tobacco-chewing is their exercise and expectoration their lighter amusement. Our public bodies, who know that tuberculosis, pneumonia, and sometimes cerebro-spinal meningitis, are thus spread, print little notices that say, politely, "Please do not spit." Their effect is probably *nil.* The mental equipoise of the classes they are meant to reach is not in the least disturbed. Rather the opposite. Our corner-boy sees the notice and is reminded that he can spit if he likes, and promptly does so in a spirit of manly independence characteristic of the free-born Briton. What is really wanted is a bye-law, and it affords us pleasure to record the fact that at least two towns already have it. In Birmingham and Southport the casual sputum-scatterer may be fined. We hope he is. His habit is a nasty one, æsthetically offensive and dangerous as well, and should be quenched with all convenient rapidity. Precept upon precept has been tried and found wanting; fine upon fine may have more effect. We must keep hammering away, and when we know that only he is blessed that expectorates nothing, we shall not be disappointed.

Nurse.

We are quite used to nurses. In our student days they were common objects of the hospitals we used to walk, and after we had recovered from the primary fascination of frill-less femininity, we realised that they were people who could do things. We now think of them as handy things to have about our patients' houses. Our relationship to them is clear. Like the centurion, we say "Do this," and she doeth it. So do the rest of the household. We are autocrats, and they must obey. We forget that our subordinates act and interact on each other. The status of nurse to patient's family is a peculiar one. It is like the doctor's, in that each renders personal service for pay, while the employer is under the control of the employed. Doctors were once ranked a little lower than body servants, but have raised themselves by improving their standard of work till it was out of reach of the menials. So with nurses. A few years ago they were below the maids, and recognition of their attainments does not come in a flash. They, too, like any doctor, must turn their hands to the lowliest work in humble homes. And so we find their function often misunderstanded of the people, who are apt to use them like dictionaries—consulted and bowed down to when information and help is wanted, and then shut up and put back in their place. It is for us to see that this does not happen if we can help it, as the net result is not one calculated to help our patient, but people take a great deal of educating before they are fit to have a sick person in the house. The ideal nurse is much more easily achieved; the trouble with her is that as soon as she approaches perfection someone realises it and marries her.

Oysters in Health and Disease.

That "seductive bivalve," the affectionate term applied to the oyster, is about to be with us again, to our delight and satisfaction. The fact that the oyster season once more begins next month seems to suggest a few reflections upon the favour enjoyed by this especially popular article of food. Although regarded universally as a luxury it is nevertheless a nutriment of great value, consisting, as it does, of ten per cent. of protein in a highly assimilable form. In addition it contains phosphorised fats and glycogen, while the salt absorbed in its tissues acts as a direct stimulus to the gastric secretion. Thus a French observer has recently pointed out that in certain diseases its action is especially beneficial, mostly in conditions in which disturbed gastric function is a prominent feature. As a stimulant to digestion, in anæmia, dyspepsia, during convalescence after infective disease, atony of the stomach, and gastric ulcer, oysters may be highly recommended—and this prescription, by the way, is one to which patients usually would not be likely to object. Still there is a class of dyspeptics, those whose gastric secretion does not require stimulation, to whom oysters would not be indicated, either for dietetic or therapeutic purposes. Among these persons gastric hyperacidity or hypersensitiveness prevails, to which the special dietetic properties of the oyster would tend to add, thus proving harmful in its effects. While, however, the oyster is undoubtedly a valuable article of diet in disease, the fact remains that the subtlety of its attraction can only be fully appreciated by the healthy person—the man who would be glad if his pharynx extended five miles in length in order to afford him time to grasp the delicacy of the flavour.

Gastric Ulcer and the Bacillus Coli.

Apropos of the idea expressed in the Address in Surgery at the annual meeting of the British Medical Association at Brighton that some infection in the vermiform appendix or its immediate vicinity might be the cause of gastric ulcer, it is interesting to note that some experimental evidence is forthcoming in support thereof. It has been stated by Sir Berkeley Moynihan that some quiescent inflammatory lesion of the appendix seems especially potent and persistent in playing the part of an infecting agent in relation to gastric and duodenal diseases. Dr. Edgar C. Steinharter, of Cincinnati *(a)*, has recently demonstrated that gastric or duodenal ulcers can be produced in rabbits by the intravenous injection of clumped colon bacilli. In a preliminary note he records the fact that an injection of 2 to 3 c.c. of an emulsion in broth of active strains of the *Bacillus coli,* agglutinated with weak solutions of acetic acid and hydrochloric acid, into the ear vein of rabbits was uniformly followed by the formation of a gastric or a duodenal ulcer within 24 hours. It is not unnatural to suppose that such ulcers might be formed in man under analogous conditions. At any rate, this observation shows the importance of the colon bacillus as a factor in the production of necrotic lesions. Further developments of these investigations will be awaited with interest by pathologists, physicians and surgeons alike.

(a) *Boston Medical and Surgical Journal,* vol. clxix., No. 3.

A New Drug.

In the report for 1912 of the British Consul for the district of Harrar in Abyssinia, allusion is made to a drug, peculiar to the district, known as "kat," of which use is commonly made by the natives. According to the observations of Mr. Dodd, the Consul in question, the consumption of the drug is confined to the male members of the Mohammedan population, while the true Abyssinian does not use it. The evidence shows that the drug has a temporary stimulating effect which, however, soon passes off, and is followed by a listless state, a loss of appetite, and insomnia. Chronic "katism" implies poor physique, indolence, and lack of intelligence, features which are transmitted by hereditary descent. A drug of such active potency might be made the subject of pharmacological and therapeutic research, and its physiological effects submitted to experimental investigation. Possibly "kat" might contain, despite its apparently noxious properties, certain attributes which might prove of extreme value for therapeutic purposes. Therein lies the interest of the discovery of a new drug. It is never possible to foretell its therapeutic possibilities until its action has been determined by scientific research. Then it is that surprises may be forthcoming, and a new drug may then come into vogue with a clatter of applause, supplying a want which had hitherto been unfilled. We do not say that there is anything in "kat" of this nature; precisely what seems to be understood by "kat" is the "young and succulent leaves of a small tree which in appearance is not unlike the coffee bush." Its properties apparently are those of a narcotic—similar to, though more potent than, opium. At least "kat" must contain an alkaloid, the physiological properties of which it would be interesting to determine.

The Pathogenesis of Salvarsan Fatalities.

There is always a tendency on the part of some critics to over-rate the drawbacks of any new remedy, and salvarsan is no exception to the rule. What with specific effects upon the nerves of special sense and the latest "bogey" of hæmorrhagic encephalitis the devotees of "606" have as much as they can do to answer the objections of those who would seek to put back the clock of syphilographic progress. In the opinion of high experts, such as Dr. W. Wechselmann,(a) the majority, if not all, of the fatalities from salvarsan injections are nearly always due to some error in *technique*. The entire experience of this author with more than 25,000 injections leads him to the conclusion that salvarsan is less toxic than mercury. With an exact *technique*, the careful adaptation of the dose to each individual case, the observation of the urinary secretion, and the cautious use of mercury after the last injections, a fatal issue with salvarsan should become a greater rarity than ever.

Should Diachylon be Scheduled?

The practice of taking diachylon by women who wish to avoid the inconveniences of pregnancy appears to have first obtained in the neighbourhood of the "Potteries" district of North Staffordshire. It is well known that in the past this centre has been quite a notorious seat of industrial lead poisoning. A few years ago cases of poisoning from the administration of diachylon as an abortifacient were comparatively frequent, so much so that pressure was brought to bear upon the Government to schedule this substance as a poison. The question has been recently brought up again by Dr. Arthur S. Hall, of Sheffield, in a valuable paper read before the Section of Forensic Medicine of the International Congress of Medicine, who has pointed out that the practice is again assuming such proportions as to demand prompt and strong repressive measures. It appears that the practice of dealing in diachylon pills is supplemented largely by the handing on of the information from woman to woman, and there seems no doubt that it is in this way the practice is chiefly spreading. Many of the women suffering from plumbism have admitted that they were not pregnant at all, and that they were told to take diachylon in order to prevent them becoming pregnant. In most cases it is impossible to find out where the pills have been obtained; and, as a matter of fact, it is more commonly the information that a pennyworth of diachylon divided into bits and taken several times a day will produce the required result, which has alone been received from a friend. The women who are keeping up this practice are stated to be of the ignorant class. They do not know that plumbism causes death of the fœtus, or that diachylon causes plumbism, nor, in many cases, that diachylon contains lead at all. Such knowledge amongst this class is limited to the very few areas where there are lead industries. The practice has extended far beyond these areas now, and to the bulk of the women in these outside areas their knowledge of the matter begins and ends with the one word "diachylon." Were the sale of the article checked, or, even better, entirely prohibited, no one would suffer thereby, and a large part of this dangerous practice would cease entirely.

(a) *The Urologic and Cutaneous Review*, July, 1913.

PERSONAL.

H.M. the King has been pleased to give directions for the appointment of Mr. Fitzmaurice Manning (Deputy Principal Medical Officer) to be Principal Medical Officer, Northern Nigeria; and of Mr. Thomas Hood (Deputy Principal Medical Officer) to be Principal Medical Officer, Southern Nigeria.

Dr. T. Glover Lyon has been elected a Warden of the Barbers' Company.

Mr. James Adamson Bell, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer to H.M. Prison, Gloucester.

Dr. G. I. T. Stewart, C.M.O., has been appointed Chief Tuberculosis Officer to the East Suffolk County Council.

Dr. G. S. Trail, of Strichen, was the recipient the other day of a suitable testimonial in recognition of his services as Secretary of the Buchan Medical Society for twenty-five years.

Dr. Thomas Henry Peyton, Tuberculosis Medical Officer to the County Council of the West Riding (Wakefield District), has been appointed to a similar position for the County Palatine of Chester.

Sir Arbuthnot Lane, Bart., M.S., F.R.C.S., will deliver the opening address of the winter session of the North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham) on Thursday, October 23rd, to which all qualified practitioners are invited.

The Lancashire County Council have appointed the following three whole-time Tuberculosis Officers:—Mr. Edward H. A. Pask, M.D., B.S.Lond., at £500 per annum; Mr. Burgess MacPhee, M.B., Ch.B.Glasg., at £400 per annum; and Mr. J. Logan Stewart, M.A., M.B.Glasg., at £400 per annum.

CLINICAL LECTURE

ON

ACQUIRED MENTAL DEFECT. (*a*)

By A. F. TREDGOLD, L.R.C.P.Lond., M.R.C.S.Eng.,

Consulting Physician to the National Association for the Feeble-Minded, &c., &c.

Gentlemen,—Persons suffering from mental defect may be divided into two groups In the first, which embraces between 80 and 90 per cent. of all cases, the defect is an intrinsic one; that is to say, it is due to an inherent blight, a deficiency or pathological change in the neuronic determinant of the germ plasm, in consequence of which the cortical cells concerned with the manifestation of mind are unable to attain complete development, so that there results a varying degree of amentia. This group has usually been described as "congenital"; but although the condition is inborn, it is not necessarily manifest at birth; it may not be apparent until several years after birth, and hence I think the better term is that of *intrinsic* or *primary* mental defect.

In the second group there is no morbid heredity and the germ plasm is healthy; but the development of the cortical cells of the brain has been interfered with by some external influence, some factor of the environment. The mental defect which results is thus accidental or acquired, but since it may be acquired before, as well as after, birth, I prefer to use the term extrinsic or secondary for such cases. It is with the group of *acquired, extrinsic* or *secondary* mental defect that I here propose to deal.

As I have just stated, the group is a relatively small one, probably comprising not more than between 10 and 20 per cent. of all cases of amentia; but amentia is so common that even this proportion means a very considerable number of patients. Moreover, the possibility of amelioration is so dependent upon early diagnosis as to make the group one of great importance as well as of no little interest to the practitioner.

The external factors which may in this way produce arrest of mental development are very numerous, and the pathological conditions found in the brain after death are of the most diverse nature. Nevertheless, it is possible to divide the group into certain classes, and I shall accordingly consider acquired mental defect under three headings, namely: (1) Toxic; (2) vascular; and (3) nutritional.

Class I. Amentia due to Toxic Causes.

The class I shall first consider is that in which the arrest is produced by toxic agencies. As you are well aware, there are many substances which act as poisons upon certain of the body cells. For instance, there is the inorganic group, well-known examples of which are arsenic, lead, and phosphorus. There is the organic group, familiar instances of which are alcohol, carbon-monoxide, hydrocyanic acid, etc. Lastly, there is the group of toxins produced by micro-organisms. It is these last which we find to be chiefly concerned in the causation of mental defect.

In most cases they would appear to bring about a real poisoning and necrosis of the cortical cells, but inflammation is generally present as well, so that the clinical signs of the process are those of an acute encephalitis, meningitis, or meningo-encephalitis.

There are many micro-organisms which may act upon the brain cells in this way. For instance, the pneumococcus, gonococcus, various streptococci and staphylococci and the bacillus of influenza are all capable of causing inflammation and necrosis of cortical cells. In such cases the affection of the brain is usually secondary to some acute process elsewhere, such as inflammation of the lungs, influenza, otitis, rhinitis, etc. More often, however, the affection of the nervous system would appear to be a primary one and to occur independently of lesions elsewhere, and then it is probably either a cerebral or cerebro-spinal meningitis caused by the diplococcus intracellularis of Weichselbaum, or, as described by Strümpell, it is a polio-encephalitis analogous to the acute inflammation of the anterior horns of the spinal cord occurring in children. I am inclined to think that many cases of meningitis of obscure origin and many cases of so-called "sunstroke" and even "fright" really belong to one or other of these last two groups.

The clinical course of the illness is variable. In a proportion of cases prodromal symptoms are present, the child being listless and suffering from malaise for two or three days before any cerebral symptoms make their appearance. In most cases, however, the onset is much more rapid and he is suddenly seized with headache, vomiting and fever, speedily followed by convulsions or unconsciousness. The pain in the head is usually a marked feature, being very severe; pain in the back also is often complained of. The respiration is apt to be slow and irregular; the pulse may be slow or rapid, but is usually weak. The convulsions are general, and resemble those of epilepsy; sometimes they are continuous, so that a status epilepticus results; but in other cases they occur as isolated fits, the patient being either delirious or comatose between whiles. The symptoms follow no definite course and differ considerably in different patients, but they are always such as to make it quite obvious that the child is seriously ill and that the seat of the trouble is the brain or its meninges. These symptoms are practically the same whether the brain is affected primarily or whether it is involved in the course of some other condition, such as influenza or pneumonia.

In a few, but I think a very few, cases the child recovers completely. In others, after an illness of ten or fourteen days, there is a marked change for the worse; the pupils dilate, the pulse and respiration become more irregular, the coma deepens and the patient dies; sometimes the end comes after a series of convulsions. But neither of these terminations concerns us; there is a third result, and these are the cases to which I wish to draw your attention. The patient's life is spared, but the illness has left an indelible mark upon the brain cortex, with the consequence that he suffers from some degree of mental defect.

(*a*) A lecture delivered at the Medical Graduates' College, London, Feb. 26th, 1913.

In most cases where the brain tissue has been thus damaged, the mental change is noticed at once. If the child had begun to speak, he may now be speechless. His disposition may be altered, so that the persons, the playmates and the games of which he was formerly fond are now distasteful to him. With this there is either unusual irritability or apathy and dulness, and examination speedily shows the presence of intellectual impairment. As time goes on this is seen more and more in the difficulty he experiences in learning. In a few cases recovery from the illness at first appears to be complete, at any rate to the parents, and it is only after a time, when the child begins to go to school, that he is found to be incapable of mental application and of progressing with his studies. Incurable deafness is not uncommon in cases of this kind. With regard to the degree of defect, the brain lesion may be so severe that the child is rendered idiotic from the beginning; in other instances it is much less serious, but the patient cannot keep abreast of his compeers, and as time goes on he is left further and further behind in a state of incurable feeble-mindedness. I cannot say what proportion of children who have suffered from encephalitis or meningitis are thus rendered permanently weak-minded. No doubt, as I have remarked, very many of them die, whilst a few seem to recover completely; but the likelihood of interference with brain development is so great that the utmost caution should be exercised in giving a prognosis. It will be more convenient to discuss the factors influencing our opinion after we have considered the next class.

Class II. Amentia due to Vascular Lesions.

In addition to the arrest of cortical development brought about by toxins, cerebral lesions may be produced and growth interfered with by such vascular changes as hæmorrhage, thrombosis and embolus. It is this class we have now to consider.

The commonest of these lesions is undoubtedly hæmorrhage. Thrombosis occasionally results from asphyxia neonatorum, and embolus may occur in young infants suffering from rheumatic endocarditis, but both of these are comparatively rare. The hæmorrhage is generally meningeal, and usually takes place at the time of birth, being caused by the prolonged pressure incident to a protracted labour. The forceps have often been blamed for the bleeding, but it is very doubtful to my mind whether skilfully applied forceps have ever of themselves produced serious injury to the brain. Rupture of a cerebral blood vessel may take place during a severe paroxysm of whooping cough, and at times it follows direct trauma in the shape of a fall or blow. This last may occur before as well as after birth, and may be accompanied by laceration of the brain cortex.

In the great majority of the birth cases, which is by far the most numerous group, the child presents well-marked asphyxia when born, from which he is resuscitated with considerable difficulty. For several days he remains torpid, with feeble pulse and respiration, tense anterior fontanelle and contracted pupils. He does not cry, and requires much rousing before he will take food. His muscles are rigid, opisthotonos may be present, and convulsions are frequently seen. A little later on evidence of paralysis in one or more limbs is noticed. Sitting up, walking and speech are all delayed, and it is soon evident that the child's mind is not developing as it should. As time advances, the fact that his intellect is impaired becomes more and more obvious.

Paralysis is a very common feature of these cases, and the condition is often termed "paralytic amentia." It may be a monoplegia, hemiplegia, diplegia or paraplegia. Probably diplegia and paraplegia are really the most frequent lesions, but since these mean a very severe affection of the brain, the majority of such cases die with the first few weeks or months of life, and hence it is a monoplegia or hemiplegia that we usually see in association with this variety of mental defect. In addition to the paralysis the affected limb remains livid, cold and much smaller than the corresponding healthy one. Jacksonian or epileptic convulsions occur in a considerable proportion of these cases, and athetoid or choreiform movements are very common. There is usually some flattening of the skull over the affected side. The degree of amentia varies from gross idiocy to mild feeble-mindedness.

These two, the toxic and the vascular, are the commonest varieties of secondary or acquired amentia, and to one or other of them you will be able to refer the great majority of cases of mental defect which are not of intrinsic origin. I have dealt with them separately up to this point, because it seems to me important that we should understand their different modes of origin, but we may now consider a few facts applicable to both of them. And first of all it is worth bearing in mind that the lesions seen upon the *post-mortem* table long after the incidence of the initial pathological process generally differ very considerably from those at the beginning. We do not yet know all the factors bringing this about, but it is quite certain that many secondary changes may result, so that in one case we find areas of sclerosis, with shrinkage, in another chronic meningitis, cortical agenesis and heteropia, cysts, porencephaly, hydrocephaly, or the like. Sometimes these give rise to more or less distinct types, which may be recognised clinically, but it must be remembered that these lesions are after effects only and that the real cause of the defect is the destruction of a cortical area, to which may be added an arrested growth of those parts of the brain which are anatomically connected.

With regard to the diagnosis of these cases, if several months or years have elapsed since the incidence of the primary lesion, there will seldom be any difficulty. If real defect is present it will readily be ascertained by a psychological examination on the lines I have indicated in a previous lecture, and that the defect is of the secondary variety will be shown by the absence of any neuropathic heredity and by the presence of a history of a toxic or vascular lesion like those I have described. The mental defect may be of any degree, and although idiocy usually reveals itself by its characteristic physiognomy, it is well to remember that those patients who are merely feeble-minded or even imbecile may have the outward appearance of ordinary individuals. This arises from the fact that the germinal material is healthy, the defect is merely accidental, and consequently is unaccompanied by any of those anomalies of bodily development—stigmata of degeneracy—which are such a distinctive feature in cases of primary amentia. Persons suffering from acquired mental defect are, indeed, as remarked by Langdon Down, often "well-grown, comely and winsome."

If the case is seen at the onset the matter is very different, and you will often find it exceedingly difficult to answer the parents' anxious enquiry as to the likelihood of intellectual impairment resulting.

Of the children born with asphyxia, the number in whom amentia results is extremely small, and careful observation of the child for a few days will usually enable the physician to reassure the parents on this head; unfavourable symptoms are convulsions, extreme torpor or persistent screaming. Of the toxic cases happening during early childhood, the proportion who become aments is much larger, and this possibility can never be excluded with certainty until the lapse of some time after the illness. It is very fallacious to judge of the probability of mental impairment from the presence of paralysis, whatever the nature of the lesion. Should paraplegia or diplegia be present it is true that there will probably be some degree of incurable mental defect, because this means that both hemispheres have been involved, and it is obvious that the greater the extent of the lesion the more likelihood will there be of psychic injury. But, apart from this, the mere presence of paralysis is a very uncertain indication. I have seen many instances of severe hemiplegia in which the children grew up, not merely non-defective, but of unusual brightness and intelligence; conversely I have seen profound secondary amentia, caused by a birth injury or toxic infection, without any trace of paralysis. No doubt these differences have been due to the particular cortical region which has been involved by the morbid process.

The symptom of most unfavourable import is undoubtedly epilepsy, and if convulsions continue, even at comparatively rare intervals, after the fever has subsided and the child has recovered from his original comatose condition, then the mental outlook is very serious. I do not mean to say that in every case which is followed by occasional epileptic fits, even if some paralysis be present as well, the prognosis as regards improvement is necessarily hopeless. This is not so, but it is an undoubted fact that in the larger proportion of these cases in which epileptic convulsions occur mental impairment will result, and only too often to a severe degree.

This leads me to say a few words regarding *epileptic amentia*. In the cases I have just referred to, both the amentia and the convulsions are the result of a common cause; they are, in fact, symptomatic of, and produced by, a gross cerebral lesion. It often happens that at first the fits are Jacksonian in character; later on, however, they tend to become generalised and to resemble those of ordinary idiopathic epilepsy. But idiopathic epilepsy, that is epilepsy occurring in the absence of any demonstrable morbid anatomical condition, may itself give rise to mental defect, and it is to defect so caused that the term "epileptic amentia" is applied. You are well aware that repeated epileptic attacks, whether of the minor or major variety, are very liable to degrade the intellect and produce some degree of dementia; consequently you will readily understand that should these attacks occur at an age when mental development is still incomplete, they will be very liable to arrest that development and so produce secondary or acquired mental defect. If epilepsy occurs before the age of 5 years the probability of development being thus arrested and some degree of defect being produced is very great. Much, however, depends upon the frequency of the fits and their response to treatment. I have seen several cases where marked arrest was present, but where the successful treatment of the epilepsy was followed by a considerable improvement in the mental status. I may here remark that it is sometimes stated that mental defect may follow "shock" or "fright." Undoubtedly such causes may bring about arrest in those hereditarily predisposed, but I doubt whether they are ever capable of so acting in a normal child.

Before leaving these two varieties of defect let me add a few words regarding their treatment. Speaking generally, it may be stated that if the case is really a secondary one, and not a case of primary amentia complicated by a gross cerebral lesion, there is a probability of a fair amount of improvement under proper educational methods. And on the whole I am inclined to think that the prospects of amelioration are better in lesions of purely vascular than in those of toxic origin. This may partly be due to the fact that vascular lesions generally occur during birth or at an earlier age than those of a toxic nature; but it may also be due to some extent to the difference in the pathological process.

It might, perhaps, be thought that benefit would result from some surgical procedure, and as a matter of fact, parents are often very anxious for the performance of an operation. I must confess that I have very little experience of the effect of operation in such cases; possibly, if one could diagnose the presence of a blood clot and locate its position, operation might be undertaken; but in other cases, in view of the nature of the lesion, it is difficult to see how this could possibly be of any benefit, and I should certainly be very loth to recommend it.

Whatever the nature of the morbid process, its effect is, in most instances, to destroy, or arrest the development of, a group of cortical cells and their ramifications, and treatment must be directed, firstly, towards limiting the lesion, and secondly, towards educating other cells to perform the work of those which have been rendered *hors de combat.* With regard to the first of these desiderata, I doubt whether drugs are of much use. I have frequently prescribed iodide of potassium, also mercury, in view of their supposed resolvent action, but I much doubt whether they have had any real effect. More can be done, I believe, by careful attention at the first to avoid undue light, noise, movement or any external stimulus which might increase cortical excitement. The condition of the bowels requires attention, and when recovery is taking place abundant sleep is essential; it should be obtained by paraldehyde or the bromides in preference to opium. A little later, plain nutritious feeding is needed, and I think that iron, arsenic and the glycerophosphates sometimes prove of value in assisting cerebral nutrition; strychnine must be given with the greatest possible caution.

Provided the lesion has happened while the cortical cells are still in an early stage of structural development, there is, to my mind, some evidence that compensation may occur through the development of other neuroblasts to take the place of those which have been destroyed, and this supplies the indication for our chief treatment, namely, regular, systematic training. I do not propose to go into the details of this; it can only be carried out properly by a skilled, patient teacher acting under the constant supervision of an expert who is capable of forming an opinion as to the nature of the psychic injury and the most appropriate methods of remedying it. This much, however, is certain, that training of this kind is absolutely necessary if improvement is to result, and that it must be begun at the earliest possible moment. No more fatal plan can be adopted than the, I am sorry to say, only too common one of deluding the parents with the fond hope that all will come right with the lapse of time and that the child will grow out of it "when he is seven."

Class III.—Amentia Due to Nutritional Defect.

The last group of cases to which I wish to direct your attention are those in which the growth and development of the brain are defective in consequence of inadequate nutrition. Like every other organ in the body, the growth of the brain is dependent upon two influences; firstly, a tendency inherent in a certain portion of the fertilised germ cell to grow, to proliferate and to become differentiated into various orders of nerve cells, each having its own particular connection and peculiar function; secondly, upon the presence of a nutritive material adequate in quality and amount.

Now it must be confessed that at present we know very little regarding the nutritive requirements of the various bodily organs, but it seems certain that the brain, at any rate, requires for its growth certain particular chemical constituents, and if these are lacking, the normal development cannot take place. We then have a form of amentia which I have called "Nutritional."

One of the most interesting and best known examples of this variety of defect is *cretinism*, which is due to an inadequacy of the secretion of the thyroid gland. The cause of the athyroidea we do not yet know, neither do we know whether it is some particular constituent or the whole of the secretion which is necessary; but that the brain cells cannot attain full development if this secretion is wanting is quite clear; consequently all cretins suffer from some degree of mental defect. We see a similar effect upon cerebral nutrition in the myxœdema occurring in later life. The signs and symptoms of cretinism are so well known to you that no description is necessary here; I merely mention it as a very interesting example of the group of acquired mental defect due to defective nutrition.

There is another very interesting type of amentia known as *mongolism*, which is often mistaken for cretinism, although a close examination will readily show the difference. The pathology of this condition is very obscure. Heredity seems to play some part, although perhaps a slight one; and in most cases there are indications of exhaustion on the part of the maternal generative organs. It may eventually be found that here also there is a deficiency of some internal secretion which is vital to the development of the brain.

Leaving these specific deficiencies, let us now consider the question of the effect of general bodily malnutrition upon mental growth. The statement is commonly made that the defective nutrition and the insanitary surroundings which *inter alia* form part of "slum life" are responsible for mental defect. So far as my experience goes this is very rarely the case. I have seen instances, it is true, where the normal evolution of the mental faculties has been considerably in arrears in consequence of such conditions. I have seen a few cases where these arrears have never been made up, so that some degree of real amentia has resulted. But such cases are relatively few, and if you can exclude the presence of any hereditary tendency, you may reassure the parents, for as the bodily condition improves under good feeding, sunlight and fresh air, combined if necessary with suitable medicaments, the mind will undergo a like change.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Robert Knox, M.D., Director, Electrical and Radio-Therapeutic Department, Cancer Hospital; Honorary Radiographer King's College Hospital. Subject: "Radium in the Treatment of Malignant Disease."*

It is estimated that the adulteration of food costs the British people annually £66,000,000 and that each person is defrauded of a penny a day.

ORIGINAL PAPERS.

APEX-TREATMENT FOR PULMONARY CONSUMPTION.

By WILLIAM EWART, M.D.Cantab., F.R.C.P.,

Consulting Physician to St. George's Hospital and to the Belgrave Hospital for Children; formerly Assistant Physician and Pathologist to the Hospital for Consumption, Brompton.

(Concluded from page 196.)

VII.

THE USES OF UNILATERAL BREATHING IN TREATMENT; AND OF THE CHEST-CLIP FOR DIAGNOSIS.

It is not likely that the mechanical principle underlying this simple utilisation of a natural function will ever cease to be of use in preventive apex-culture; more probably developments may arise from it which we do not foresee. Possibly in some improved shape the chest-clip may find a permanent place in actual treatment. For the present it can only claim to be an addition to our armamentarium for clinical study; a handy means for settling the all-essential question, "Shall we rest and deflate, or shall we freely ventilate the torpid and already slightly tainted apex"? Its other clinical purpose, as we shall presently show, is to assist our early diagnosis.

For therapeutic use, as a modifying regulator of apical breathing, it offers obvious advantages. Unlike Tidey's strapping, it is "off" as quickly as it is "on," and is immediately transferable from one side to the other. Its action is definite, adaptable, and measurable. Locally its pressure gives effectual rest at any time we may deem rest desirable. Or, if we simply shift it to the sound side, it will gently exercise the affected apex with unilateral breathing. Which shall we try, its resting or its exercising function?

The answer is, that all things are good and bad according to their regulation. That facility is a feature of this application of the differentiating local apex principle. We can finely graduate both the rest and the exercise, by using springs of different strengths.

The trend of practice is distinctly swerving; and the policy of rest has already been largely departed from. Paterson gives graduated labour even to the open stage; and Forlanini treats it in the surviving apex by doubling the pulmonary work. Nature, too, had always conducted her early spontaneous cures by keeping the lung and the heart at work as usual; whilst we have always exercised both of them strenuously for prevention. Nevertheless we might easily go too far or too fast in this new direction. It is equally certain that rest has its sphere, and that its indications have not yet been clearly determined. Probably they are not to be defined by rule in any individual. Therefore the chest-clip might be of some use as a ready *individual test* as to fitness for the "exercising" stage in treatment.

In pneumothorax the absolute unilateral breathing special to it is applied "full strength" to any early lesions in the working apex, although the safety of that lung is life's only safeguard. This is our justification for resorting tentatively to a similar, but less forcible method, under non-precarious conditions, and where there is a second working lung in reserve, namely, a perfectly healthy lung. That trial is safe; and it is our only means of solving the fundamental question as to the proper management of the earliest stage.

For preventive use that full strength is never applied or indispensable. "Relative" unilateral breathing is much less potent, but there is no limit of time or frequency to its beneficial employment, even in the cradle where we can alternate the lateral decubitus, or at the preventorium or open-air school where the clip might exercise both apices alternately in all cases of the phthinoid chest.

The Chest-Clip. (*a*)

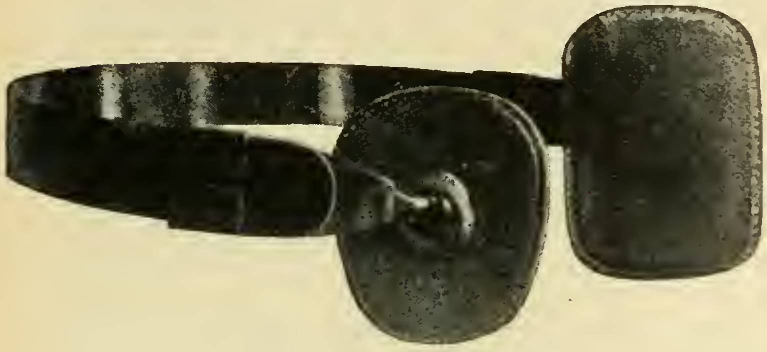


Fig. 2.—(*b*) Showing the ball-and-socket attachment of the heart-shaped front pad, and the sliding attachment of the spring.

The chest-clip is a light ribbon-spring of elongated horse-shoe shape, and of sufficient length to extend round one half of the chest from the spine where its spinal pad gives it a fixed bearing, as far as the parasternal region, where its pectoral pad exerts its pressure. The pads are easily removable to fit other springs of different length and strength, and the ball and socket-joint with which they are furnished enables the front pad to be applied to different points of the upper pectoral surface. In addition to the localised pressure exercised at any point selected, the effect of the spring is to restrain the respiratory movement over the upper part of that side of the chest, and to increase it over the other. It is, moreover, found that the lower part of the chest is concurrently influenced in the same manner. As it is easily slipped on and off under the coat or shawl, the chest-clip is a convenient means of modifying the type of breathing for varying periods and in varying degrees, and of raising or lowering the respiratory activity of one or the other apex.

By keeping at relative rest the affected apex, it enables the patient to take exercise and full breaths without throwing any additional respiratory stress upon the damaged apex. The opposite results would follow were the spring to be applied to the sound side; a more or less unilateral increase of breathing would occur at the seat of the lesion. In artificial pneumothorax, that is precisely, on a much larger scale, what happens to the working lung, which is most often already slightly affected; but the unilateral breathing is then "absolute," as there is no breathing whatever on the other side. It might be said of the "relative" unilateral breathing set up by the chest-clip that it represents one of the two factors of the cure by artificial pneumothorax, namely, the mechanical; but it does not represent on so large a scale the other contributory factor, the suppression of toxis.

The Chest-Clip in Diagnosis.—Whilst the therapeutical value of unilateral breathing, and of the chest-clip which is identified with it, still remains an open question, there can be no doubt as to the great value of the appliance for *diagnosis*. In its primitive form, as a simple spring guarded at both ends by leather, (*a*) I have used it constantly for the last three years for the sake of utmost economy of time combined with utmost definiteness in conclusions. The advantages to be gained need hardly be explained to experts. It solves the difficulty of the personal respiratory factor in the patient, namely that of his uncertain response to our attempts to obtain the different degrees of respiration we require, and of the confusion which arises therefrom. The first step is an examination of the chest as it is, before calling upon him for any special breathing. The second is to apply the clip to the sound side, without explaining its purpose, and to let it take action, whilst we examine the pulmonary bases, the heart, and the abdomen. The apical percussion and auscultation are then renewed, and we shall often find considerable changes. Lastly, the clip being still *in situ*, we call for deep breathing and for cough and note the result.

The cases in which the chest-clip is of most signal service are those in which a differentiation has to be made between focal atelectasis, and focal lesions; or between "attitudinal" or "functional scoliotic" inexpansion with dulness, and any genuine lesional inexpansion. It corrects the former and not the latter. These cases are exceedingly common. They are often perplexing, and always cast a serious responsibility upon our diagnosis. That perplexity sometimes gives rise to needless alarm and trouble, and has even occasionally led to a course of sanatorium treatment, which might not have been indispensable.

Finally, as the chest-clip is a delicate test for a latent scoliosis at its earliest stage, and is also its immediate automatic corrective at that stage, it may prove to be the most efficient protection against the progressive development of the deformity, and might save many juvenile patients from permanent damage, or from much irksome later treatment; whilst serving a more vital prophylaxis, that against the risks of pulmonary disease which attach to spinal debility.

VIII.

GENERAL CONCLUSIONS.

THE "THOROUGH APEX TREATMENT" OF CONSUMPTION AND ITS MECHANICAL FACTOR.

Practically the chief danger is not tuberculosis itself but the phthisis pulmonalis which it entails, and which keeps up the supply of its immortal brood. Ever since man first dwelt in prehistoric palaces the bacillus has been at work to immunise the civilised races against its worst infections. Our latest scheme for improving Nature's plan is the proposed extermination of the house fly. Who knows what autumnal scourges we may be inviting thereby? Meanwhile, we are up for exterminating the bacillus. With our eyes open we are rushing back into the peril of the virulent tuberculosis which decimates the still non-immunised, yet "open-air" aborigines with large chests

---

(*a*) Obtainable from J. Walgrove, 4, Hurdwick Place, Harrington Square, N.W.

(*b*) Erratum.—This figure should have appeared on page 195. The figure accidentally substituted for it on that page is there coupled with the wrong legend, which should have read as follows:—"Fig. 1. Smaller pattern for children. The clip is figured in its expanded condition, under stretch of the thickness of the right side of the chest."

(*a*) This simple pattern is supplied at 3s. 6d.

and hearts. Such being our deliberate policy, in its pursuit we might as well be thorough as well as economical. The lung is the breeding-ground, by sole reason of its phthisis. It is wonderfully resistant, except in the phthinoid, to the development of phthisis from simple pure tuberculosis of the apex. But in the phthinoid and others the lung is not strong enough mechanically, in spite of its racial immunisation which suffices in the robust for a spontaneous recovery; neither is their heart. Their phthisis is our enemy. Our first step is to *identify* the phthinoid and the specially predisposed; and the next is to try to add to their inherited or acquired bacillary immunisation the *mechanical cardio-pulmonary immunisation* which they lack. This is mainly a question of school inspection, and of the preventorium. Had we taken those steps a third of a century ago, instead of building first a temple to bacillo-therapy, our present roll of phthisis would have been immensely less than it is, and "the conquest" of the bacillus not a mere *nomen et umbra*.

As regards the apex, the neglect of the mechanical factor has been flagrant "from beginning to end." The worst omission is that of a selective school inspection for the detection of any ascertainable liability, whether merely circumstantial or also structural in addition, which would carry with it the duty of prevention. A suggestion was recently made of a *routine* clinical examination for soundness, and of a certificate of soundness, as the first indication in the systematic prevention of appendicitis (*a*). Phthisis is, however, a vastly more important issue, and a complete return of the "uncertifiable" is urgent in proportion.

In diagnosis, whilst the X-rays contain a growing promise, for which the school might conceivably afford the instrumental opportunity, the success of our old physical examination is dependent upon progressive mechanical improvements, which are often neglected though offered. The chest clip may perhaps get a better chance of usefulness. It is sadly needed for the early detection of preventable apex inexpansion.

The Prone Treatment.—On the one hand, the tuberculin method pure and simple trusts merely to avocational exercise, and makes no special claim to be mechanical. On the other, the sanatorium, apart from tuberculin, is in spirit purely mechanical. Yet in the working how limited its apical methods, which so far as ascertained do not even include the humming cure. As a fact, they do not seem to contain any form of direct apical treatment. In the general scheme of mechanical "pulmonary" treatment, we might have insisted, in referring to the influence of attitude in "lateral" decubitus, upon the still more important and unheeded attitudinal influence of a perpetual "dorsal" decubitus. This was one of the worst faults of the *liege-kur*; in one sense perhaps a *felix culpa*, in that any restriction imposed upon the normal use of the main respiratory reserve favours the activity of the apex if left unhampered, and is equivalent in that particular, like the tight corset in the female, or like strapping down the lung to steady it in early phthisis, to an unintended "local" respiratory apex-treatment in disguise. But, in the continued diurnal dorsal decubitus, that advantage is heavily paid for at the sacrifice of the still more important "general" cardio-respiratory asset. The *prone couch*, conspicuous by its absence at most of our sanatoria, is not open to that reproach. To physiologists and clinicians it needs only to be mentioned to convince them that it cultivates automatically the great pulmonary reserve, which is the posterior base; and that it does so by posterior costal rather than by phrenic work. They will perceive that in the "thigh-elbow procumbency" it mobilises the entire vertebro-costal mechanism; and that, by virtue of the clavicular immobilisation, is mobilises the upper dorsal section of it much more effectually than any other exercise, with the sole exception of unilateral breathing. This orthopædic principle has only recently been recognised by F. Kirchberg (*b*), R. Mesnard (*c*), F. Göppert (*d*), and H. Spitzy (*e*).

The other, or *abdominal* aspect of the prone treatment is not yet realised, except experimentally in Schepelmann's remarkable *visceral compression* (*f*) of the lung by ablation or paralysis of one wing of the diaphragm, as a substitute for pneumothorax compression. And yet it had been provided for, some years ago in the many-sided "Convalescent Machine" (*g*) for spinal re-education after prolonged recumbency; and before then in the "Infant Rest" and the "All Fours Exerciser" (*h*), as the most essential part of the "thorough treatment" of rickets, in which the leading abdominal factor is also attended to mechanically during the early recumbent stage, by means of Rose's elastic belt. In this case it is not only that the apex has to be developed whilst the spine is being strengthened and protected from scoliosis by relieving it of the weight of the head, but that the entire thoracic costo-chondral inversion has to be prevented, straightened-up, and splinted-up by a steady, upward internal visceral pressure, analogous to Schepelmann's. This is also my late corrective method for the neglected cosmetic treatment of the pigeon-breast deformity brought about by the continued neglect of the obvious mechanical indication during the active stage of Rachitis. Inshort, the prone couch provides not only the most abundantly ventilating apex-treatment, but a *posterior apex-treatment* specially addressed to the larger and stagnant "niched" section of the apex, which is the special object of our prophylaxis, and the seat of election for the earliest bacillary settlement.

The Inclined Prone Couch.—This late refinement in the mechanical treatment of excavating phthisis, which we owe to Tucker Wise, of Montreux (*i*), is not yet usually included in the sanatorial furniture, although cheap and easily procurable. The special suitability of the inclined plane for that stage had not been insisted upon by Quincke, although Piorry long ago had suggested it in his remarks on "l'expectoration provoqueé," nor by myself when introducing its continuous use for recumbent bronchiectasis, and its intermittent diurnal use by means of the Convalescent Machine or of the All Fours Exerciser. Tucker Wise's inclined wicker couch carries out in a definite degree the abdominal method suggested in Schepelmann's experiments. It is therefore worth considering as a systematic apex treatment. It has, however, been chiefly recommended by its author as a mechanical bronchial treatment, and for short instalments only. There is no doubt that in that form it is harmless as well as convenient, as the most efficient evacuant for the catarrh which inevitably spreads down the large posterior bronchial distribution as a result of a continuous dorsal decubitus, and more or less also of the long nocturnal recumbency in all cases of phthisis catarrh.

In conclusion it is hoped that a sufficient plea has been made out for a more thorough treatment of consumption. At all points the mechanical factor is the chief blank and the greatest need. In prevention, thoroughness is wanted in the identification and registration of the personal structural liability, as the most efficient notification can only deal with the circumstantial and familial liability. And it is also wanted in the shape of direct preventive apex-culture. In diagnosis the mechanical factor is capable of much more than has hitherto been attained with too little help from it. In treatment, at all stages, it is paramount for local, as well as for general or vital therapeutics. But the stage for its urgent use and for its greatest possibilities is the neglected early stage.

To sum up in a few lines this long argument : The mechanical aspect is the larger part of the bacillary question. The importation of the bacillus is mechanical, its exportation is equally mechanical. Those are the essential considerations. *"Immunisons"!* Tuberculin by all means for the blood, as an immuniser and perhaps as a hormone. But in the lung let us make straight for the bacillus. Let us turn it out if we can by the lymph and air-pump. This may also best help us to lock it up quickly and permanently in its closed stage when there is still no way out for it.

References.

(*a*) *B. Med. J.*, Vol. ii., Dec., 1912.
(*b*) *Med. Klinik*, Sept. 10, 1911.
(*c*) *Arch. Gen.*, June, 1912.
(*d*) *Therap. Monats.*, Feb. 2, 1913.
(*e*) *Münch Med. Woch.*, 1913.
(*f*) *Arch. f. Klin. Chir.*, Vol. 100., April, 1913.
(*g*) Med. Press and Circ., Feb. 19, 1908.
(*h*) Soc. for Study of Disease in Children, Vol. vii., 1907, p. 201.
(*i*) *Lancet*, 1908. Procurable at Harrod's Stores, Brompton Road.

SOME UNUSUAL CASES OF HYDATID DISEASE.

By HENRY M. O'HARA, F.R.C.S.I.,
Melbourne.

In the whole range of surgical phenomena there is nothing more erratic in the choice of its locale than the echino-coccus.

Looking through my notes for the past thirty years I have picked out from several hundred cases a few that I think are worth reporting, as each case presented some difficulty in diagnosis—In fact, the majority not being diagnosed until an exploratory operation had cleared up the condition.

Hydatid disease is not nearly so prevalent in Victoria to-day as it was thirty years ago. I attribute this to the greater care now bestowed upon the storage of drinking water, which was undoubtedly the chief carrier of the ova in former days ; dogs having free access to the domestic water-supply, which, in the country, was drawn from the nearest creek or river, but in most cases now the rain water for drinking purposes is conserved in iron tanks.

A number of different methods of attacking a hydatid cyst surgically have been advocated, but Lindemann's operation has held its own in this country and is still the one of choice. In many cases one is tempted to explore with a needle the contents of these fluctuating tumours, but I have laid it down as a hard-and-fast rule never to attempt any needle exploration unless I have everything prepared to complete the operation for the evacuation of the contents.

Case I.—Hydatid at the Back of the Eyeball.

In 1885, Dr. Mannington Caffyn asked me to see a young lady whom he had been attending for neuralgic pain in the left eyeball and diplopia. The pain had become intense, and it had lately been noticed that the eyeball protruded slightly more than the opposite eye.

On examining her I found marked proptosis of the left eyeball, painful on pressure. The vision was not affected except that she complained of double vision at times. The eyeball was fixed somewhat and could not be rotated outwards, and I thought on palpation that I could detect some fluctuation between the eyeball and the orbital plate. I suggested exploring this space with a hypodermic syringe, and I withdrew a syringe full of clear fluid, which, on examination, proved to be hydatid. I then opened up the space and removed the mother-cyst ; it was a sterile hydatid. The pain ceased immediately and the eyeball resumed its normal position.

The patient made a good recovery.

Case II.—Hydatid on the Brain.

In the Inter-Colonial *Quarterly Journal of Medicine and Surgery*, of May, 1894, the notes of a case that I showed at the monthly meeting of the Victorian branch of the British Medical Association were reported. The patient shown was a boy from whose brain I had previously removed a hydatid cyst.

On September 21st, 1890, I saw the patient for the first time. He had been sent to me by Dr. Tremearne, of Creswick, and I elicited the following history from his mother :—

"H. M., æt. 6, residing with his parents at Woodlands Station, Ararat, Victoria. He had been a healthy child until the age of 5 years, when he was suddenly attacked with severe pain on the left side of the head, accompanied by vomiting and giddiness. The pain being persistent medical advice was sought, and he was treated for migraine. He did not benefit by the treatment and was losing flesh rapidly. In September, 1889, he had a fit which lasted for two hours, and on coming round it was discovered he was paralysed down the right side, right leg and arm, and was quite blind. He had marked twitchings in the left cheek and at the angle of the mouth, and was deaf on the left side. This condition continued for nearly three weeks when the sight returned and the leg partially regained its power. After the lapse of another ten days the arm began to improve and he could use it a little. The left side of the head was now noticed to be a little larger than the right, but his general condition began to improve. The pressure was evidently relieved by slight yielding of the bone. The headache persisted and was worse at night. He spent most of his time lying down with his head resting on a large hot foment, which seemed to give him some relief. Family history was good, and his father and mother were in excellent health. He had constantly drunk water from the river which ran close to the house, and dogs and other animals were in the habit of drinking from the same source."

On examination, I found a slight prominence of the left parietal region with well-marked œdema of the scalp over that locality, painful on pressure ; double optical neuritis, more advanced in the left eye ; he was quite deaf on the left side ; there was slight aphasia ; loss of power in the right hand and forearm, but sensation was perfect ; and slight twitching at the left angle of the mouth. All his other functions were normal, pulse regular ; urine, specific gravity 1018 acid, no albumen ; temperature normal.

The symptoms of cortical pressure over the arm, leg, and speech centre were sufficiently well marked to warrant my advising an immediate exploratory operation, and having impressed upon the mother the urgency of the case she reluctantly consented to my proposal.

I called Dr. James Cox into consultation, and he having endorsed my diagnosis, I proceeded to operate. The boy having been chloroformed and thoroughly cleansed, following the line laid down by Lucas Championnière for exposing the fissure of Rolando, I made a V-shaped incision through the soft parts down to the bone; this took in the anterior third of the left parietal bone and a small piece of the temporal bone. I next applied a Hey's saw, and having cut through the bone turned up a triangle with the soft parts attached. On lifting the bone the dura mater bulged through the opening, a fine cannula was inserted, and some hydatid fluid flowed through. I now laid the cavity open and evacuated about six ounces of hydatid fluid containing numberless daughter-cysts. The mother-cyst was withdrawn and the cavity well washed out with boiled water.

At this stage the condition of the patient was most alarming, but Dr. Cox administered a hypodermic injection of ether and he rallied.

The hydatid was originally meningeal, and growing larger encroached into the brain matter.

I replaced the triangular piece of bone, merely cutting off a small piece at the apex of the triangle to admit of a drainage tube. The cavity was about the size of a hen's egg. This was irrigated daily. During this time I invited several surgeons and physicians to see him.

He made an uninterrupted recovery. I saw this young man recently. He is now working on a sheep station, and is in every respect a healthy man.

Case III.—Hydatid of the Left Lung Implicating the Pericardium.

Mr. H. was sent to me on June 20th, 1901, in consultation with Dr. A. V. M. Anderson. He had been losing flesh gradually for several months. He complained of cough and a pain in the front of his left chest. A fortnight ago an ounce or two of perfectly clear fluid came up into his mouth, there were no skins in it. Since then he had had expectoration of muco-purulent matter, which had been examined microscopically but no tubercle or hooklets had been found. He had no night sweats and the temperature had never risen above 99.

On examination, we discovered a dulness just below the left spex continuous with the normal cardiac dulness, going up as far as the second left space, two inches from the left border of the sternum. There were indistinct cracked pot sounds over this area, and some crackles at the end of inspiration. The heart was not displaced.

On June 27th, 1901, the dulness was more extensive and reached to the nipple line in the second left space. A needle was inserted into the second space and pus withdrawn.

I admitted him into my private hospital, and on July 4th, 1901, Dr. Anderson administering chloroform, I removed a piece of the second, third, and fourth ribs. The space around this was now carefully packed with gauze and an incision made into the cavity. The edges of the cyst wall were sewn to the chest, and the cyst opened and evacuated. The pericardium was now seen to form the posterior wall of the fibrous capsule, and moved with the cardiac pulsation. The cavity was drained.

The patient made a rapid recovery. I saw him quite recently when he expressed himself as feeling quite well.

Case IV.—Spontaneous Fracture of the Humerus caused by Hydatid Cyst in the Shaft of that Bone.

In 1889, Dr. Verity of Cheltenham, asked me to see a case of spontaneous fracture of the humerus in its upper third. The patient, L. H., æt. 20, the son of a market gardener, was driving a cow home, and when throwing a stick at it he felt his arm give away and become helpless and very painful. He had suffered from some pain and thickening in the arm previous to this, and had had it rubbed with a liniment thinking that it was rheumatic. Dr. Verity applied a rectangular splint and kept the arm at rest for ten days before I saw it. His reason for calling a consultation was on account of a fluctuating swelling which persisted in the upper half of the humerus at the side of the fracture.

My first impression on examining this was that it was a case probably of sarcoma of the bone as the contour was very like that condition, but the fluctuation was so unusual that I suggested exploring it.

Under strict antiseptic precautions, under an anæsthetic, I made an incision into the swelling and this was followed by a gush of hydatid fluid with numberless small hydatid cysts. The hydatid contents were thoroughly cleared out, some spicules of bone were removed, and the arm was put into a plaster-of-Paris splint with a window.

The after-treatment of this case was very tedious as pieces of bone kept coming away and union did not take place.

Three months afterwards I re-opened the wound and thoroughly removed all *debris*, and freshened up the fracture, the ends of which had not united, and the arm was again put up into a plaster-of-Paris splint. Union of the bone now took place, and six months after the original fracture he could use the arm, but there was some stiffness at the elbow joint from fibrous adhesions.

In this case, our first opinion being more pronounced in favour of sarcoma, had the fluctuation not been so evident amputation at the shoulder joint would certainly have been advised. It impresses one more than ever of the value of an exploratory incision in every case where there is the remotest doubt.

Case V.—Hydatid in the Jawbone Simulating Actinomycosis.

In 1895, Dr. Sparrow, of South Melbourne, asked me to see a swelling in the ramus of the right lower jaw of a man who had been working upon the wharf at Port Melbourne. The appearance of the jaw was very suggestive of actinomycosis. He had wasted considerably and there was a good deal of pain. Previous to his work on the wharf he had been attending to cattle in Gippsland, where lumpy jaw in the cattle was prevalent, and where some cases of actinomycosis in human beings had been reported.

On making an incision into the tumor hydatid fluid escaped. The contents of the cyst were thoroughly evacuated, the wound was packed, and he made an uninterrupted recovery.

Case VI.—Hydatid in the Apex of the Right Pleura Simulating Aneurysm of Innominate Artery.

This was the case of a man, æt. 40, who applied for admission to one of my beds in the Alfred Hospital. There was well marked bruit over the tumor, and after consultation it was decided to tie the subclavian artery in its third stage. This I did and he seemed to improve for some days, but an attack of pneumonia supervened and the patient died.

The *post-mortem* examination revealed a hydatid cyst about the size of a bantam's egg pressing upon the innominate artery.

Case VII.—Hydatid in the Posterior Surface of the Liver Pressing on the Head of the Pancreas, Simulating Disease of that Gland.

Mrs. F. L., æt. 30, married, came under my care at the Alfred Hospital during 1912. She gave the following history:—

"She had been in the Alfred Hospital in 1910 where an exploratory operation had been performed by my colleague, Mr. Hamilton Mussell. He opened the abdomen over the region of the gall bladder and a tumor was found on the anterior surface of the liver, not extending down to the edge of the liver. A needle was introduced and altered bile withdrawn. After needling in several directions clear fluid like hydatid fluid was found in small quantities, but nothing further was done. It was thought that there was a small hydatid in the centre of the liver, but no attempt at removal was made (the records in the Hospital's casebook do not say why), and the abdomen was closed."

When the patient came under my care she complained of intense pain increased on pressure (which had been constant since last operation), loss of flesh, and quite unable to attend to her duties.

On August 2nd, I reopened the abdomen in the line of the old incision and exposed the liver. Adopting the method suggested by Mr. Mayo Robson, the liver was grasped, pulled down, turned over, and the posterior wall exposed. A hydatid cyst about the size of a golf ball, undergoing calcification, was found. This was opened, several daughter-cysts were evacuated, and the mother-cyst removed. The cavity was washed out and packed with iodoform gauze.

The patient made a slow recovery and was discharged from the hospital with a sinus still communicating with the cyst cavity.

As I had resigned my connection with the Alfred Hospital, my successor, Dr. R. C. Brown, subsequently dilated the sinus and allowed a quantity of pent up *debris* to escape. The cavity was irrigated, and the patient made a good recovery.

I attribute the pain in this particular case to pressure upon the head of the pancreas and its duct, as the calcifying mass was very hard and occupied a part of the liver overlying that organ.

Case VIII.—Hydatid at the Base of the Lung Causing Laryngitis.

Mr. S. was being attended by Mr. Iredell for chronic laryngitis. The symptoms of inflammatory changes in the larynx were very marked, the cough was persistent, and the voice typical of the condition.

On examination of his chest, I discovered a small crepitant patch at the base of the left lung. Dr. A. V. Anderson endorsed this. I explored with a needle and found pus under A.C.E. I resected a portion of the rib and evacuated contents, and drained cavity.

The patient made a rapid recovery and the laryngeal symptoms disappeared.

Since the discovery of the X-rays it is now an easy matter to locate pulmonary hydatid cysts, the shadow outline shows out so clearly in the lung tissue. I feel sure that in the pre-Röntgen days very many cases of pulmonary hydatid were overlooked altogether and many others diagnosed as tubercular disease, only to be discovered at an autopsy or when the more fortunate occurrence of rupture into a bronchus enabled the patient to present the often perplexed physician with a specimen of his trouble in the form of a daughter-cyst.

OBSERVATIONS UPON SOME OF THE DISEASES WHICH ARE COMMUNICABLE FROM ANIMALS TO MAN. (*a*)

By FREDERICK HOBDAY, F.R.C.V.S., F.R.S.E.
Honorary Veterinary Surgeon to His Majesty the King; and formerly Professor in the Royal Veterinary College, London.

When I was honoured by a request to read a paper before your Society I selected the subject of "Some of the Diseases Communicable from Animals to Man," and of these, so far as our knowledge takes us at the present time, the list includes, for certain, tuberculosis, anthrax, glanders, rabies, vaccinia, mange, ringworm, measles in cattle and the *Tænia medio-cannelata*, measles in pork and the *Tænia solium*, echinococcus and trichinosis, foot and mouth disease, Malta fever, plague and sleeping sickness; whilst tetanus, actinomycosis and a number of others can be produced with equal facility in man and animals by inoculation with the same causal organism.

Truly a formidable list, and one to which others will undoubtedly be added as our knowledge increases, and one which shows the importance of a complete understanding between the members of the medical and veterinary professions to work together against the common enemy—disease. This is well illustrated when one considers the question of the diseases which are intercommunicable between our respective patients, and especially is the case in a country like ours where the people are so constituted that an affection for animals, and the desire to possess a pet of one or other species, is ingrained from childhood, extending from the kitten or rabbit of the child who can scarcely walk to the schoolboy's pony or the lady's pet dog.

All of them possess the power of becoming infected with diseases, which they can transmit to their owners either direct or by acting the part of the intermediary host.

It is to some of those of which we have certain knowledge which I propose to draw your attention to-night, as to include those in addition upon which mere suspicion alone falls would make the list so long that we should never get beyond the fringe of it, and as I am addressing an audience of London practitioners I will confine myself to the four which are most likely to be met with here, and of each of which I have had personal experience of their trasmission from animals to man.

The four I have selected are: Glanders, tuberculosis, mange and ringworm.

Glanders.

Glanders is, as you know, a disease especially seen in horses, and in London it used to be the one which was the most dreaded of all by the owner. It is scheduled under the Contagious Diseases of Animals Act, and comes under the jurisdiction of the London County Council, who have three veterinary inspectors doing nothing else but inspection work and not engaged in private practice.

Until about ten years ago it was done by certain private practitioners, and in many districts it was a

---

(*a*) A paper read before the West London Medico-Chirurgical Society, May 2nd, 1913.

most unusual thing for a day to pass without several fresh glanders cases being reported to them.

This district was a fair hotbed, and the cab or omnibus stables of Hammersmith, Fulham, and Notting Hill were always more or less in a state of infection.

This was due in part to the inefficient state of the law, which only permitted the veterinary inspector to interfere with the clinically glandered cases and not to enforce the mallein test.

Often and often have I, as inspector, been called into the stable of a cabman or contractor where a visibly glandered horse was present, and beyond ordering its destruction, have been powerless to do anything to find out whether the others were healthy or not. I had the power to inspect their exteriors but nothing further, as I could not carry out the mallein test without the consent of the owner—and very few owners would consent to this. Where the mallein test could be applied it sometimes meant the destruction of 10, 15, or even 20 per cent. of the horses in the stable, and at the very least it usually meant the horse stabled on either side of the visibly infected one.

Now, however, when an outbreak occurs in a stable the test is applied and all reactors are valued and slaughtered.

In former years the owner, if he was a cunning man, dispersed his stud and sold them at the next repository sale, or, at all events, sold any suspicious ones, thus disseminating the disease far and wide amongst his neighbours, and, in regard to man, it was principally amongst the strappers and grooms who worked in stables of this class that the disease was met with.

Although not a common disease in man, it used to be sufficiently often met with in London, Glasgow, Liverpool and other large cities to make it of interest to the medical man, who did not, however, always diagnose its presence until after, or just before, death. I well recollect how this fact was impressed upon me, because in neither of two cases in man which I have seen here in Fulham, and at whose *post mortems* I was present, was the diagnosis made until near death, although, of course, the result would in any case have been the same. Cabmen and stablemen in London know well of its contagious nature, and the names of "glanders" and "farcy" are familiar to every one of them. A horse with a persistent nasal discharge is always a source of suspicion, and if there is an enlarged sub-maxillary gland the suspicion may be strengthened and the case should be professionally examined. In connection with the discharge, and the enlarged gland too, it is a point worthy of note that if only one is affected it is invariably the left one.

Careful examination of the interior of the nostril, especially the septum nasi, may reveal the presence of ulcers, in which case the diagnosis may be confirmed at once, or it may be merely congested—a further sign of suspicion.

In any case the mallein test should be applied and the matter settled once and for all.

With this agent, the discovery of the Russian scientists Helman and Kalning, the animal is hypodermically injected in the neck (or some place where the skin is loose and where the harness does not touch), and if glandered (whether slightly or not) the temperature rises steadily, an average of from two to five degrees, within the next twenty-four hours; and, in addition, a diffuse swelling rises up about as large as the palm of a man's hand, painful to the touch, and extending on the second and third days usually in a downward direction towards the lymphatics of the shoulder. If the animal is kept alive this gradually subsides, but can be readily demonstrated again in about three weeks by a further injection.

The ophthalmic mallein test is also used, as are also the serum diagnosis and agglutination tests.

Other clinical signs on the body of the horse are the presence of swellings, usually along the course of the lymphatics of the neck or inside the thigh, termed "farcy buds," which suppurate and burst, the discharge from them being highly dangerous and infective.

It is from these that brushes, sponges, and stable utensils are apt to convey the disease from horse to horse, and from these, as well as the nasal discharge, that man becomes infected.

Of its prevalence in London you may have some idea when I tell you that in 1901 there were reported 2,370 cases in Great Britain, of which 1,828 came from London, 67 per cent. of which were from permanently infected stables (Hunting). In 1908 there were 789 outbreaks, of which 495 were in London, and 198 in the Metropolitan counties, whilst 2,433 horses were killed on acount of the disease. Last year the numbers had been reduced to only 504 individual horses for the whole of Great Britain, and it is safe to prophesy that, with the advance of the motor, in a few more years glanders will be non-existent.

Of the symptoms and course of the disease in man it is not for me to speak, but the absence of definite and differentiating symptoms makes it necessary to be borne in mind when treating stable hands, and makes inquiry necessary.

In each of the cases I saw the men had had symptoms like those of a chill, accompanied by severe muscular and articular pains; in one case the man had been ailing off and on for ten months, and his lungs were full of glanders nodules.

Of other animals, the only one the veterinary surgeon need pay especial attention to are those confined in zoological gardens and such-like places, especially lions and tigers and those of the cat tribe. Occasionally epidemics of glanders have broken out in them as the result of eating infected horse-flesh, and the effects have been disastrous.

Tuberculosis.

At the present time the question of how to efficiently deal with this disease is occupying the minds of all classes, and the new Order of the Board of Agriculture and Fisheries, which became law yesterday, will start a new crusade against this terrible disease in cattle, and through them, we hope, help to stamp it out in man.

All the domesticated animals, and even birds, are fair play for the tubercle bacillus, although some animals are more susceptible than others, and no organ of the body is exempted from its ravages. The question of heredity plays a very small and inconsiderable part when compared with that of exposure to the actual contagion, and the work of Bang in Denmark has demonstrated clearly that the offspring of tuberculous cows remain healthy and free from tuberculosis if properly guarded against infection after birth.

In the horse, dog and cat the disease is well recognised, and with the latter two this fact must be kept well in mind, on account of their constant presence in the house as pets; but it is with the cow and her supply of household milk that the chief source of danger arises, and a few extracts from the new "Tuberculosis Order" of 1913 will not be out of place.

In regard to the notification of the disease, the new Order of the Board of Agriculture and Fisheries, which came into force only yesterday, enforces compulsory notification to the police (or to an inspector of the local authority) of any cow which is, or appears to be, suffering from "tuberculosis of the udder, indurated udder, or other chronic disease of the udder," or from "tuberculosis with emaciation."

This notification has to be made by the owner and also by any veterinary practitioner who has knowledge of any of the above.

The veterinary inspector of the local authority then received instructions to inspect the animal and any others on the premises, and, with the consent of the owner (not otherwise), he may also use the tuberculin test on any other suspected beast. The inspector may enter the premises at all reasonable hours, and take samples of milk, of urine, fæces, or any abnormal discharge, and where satisfied that tuberculosis exists (either generally or only locally in the udder), a notice must be given in writing to the owner and also to the Board of Agriculture, and the animal shall be slaughtered. The carcase of every animal thus slaughtered is to be subjected to *post-mortem* examination, and a fair compensation given, this being based upon a valuation made upon the animal during life, and subjected to certain corrections if the *post-mortem* examination does not bear out the diagnosis.

The Act deals with the sterilisation or destruction of milk from any chemically diseased udder, and the utensils used to contain such milk, and also with the isolation of any beast which is under suspicion. Fairs and sale-yards are also brought in as "places" under the Act, and the veterinary inspector is required to use his authority here as well as in farm byres and cowsheds.

Owners and veterinary surgeons who fail to give notice of suspected cases are deemed guilty of an offence under the Act, and any failure to comply with the orders of the veterinary inspector is dealt with by the infliction of certain penalties.

The carrying out of this Act is one of the biggest and most responsible positions which have ever been entrusted to the veterinary profession, and it will rest with us to show that the trust has not been misplaced.

Once get the milk question settled and tuberculosis of cattle completely eradicated and we shall indeed have done something to have helped you of human medicine in your fight against disease.

When one considers that the statistics show that the human death-rate in England and Wales in 1910 was 51,317 from tuberculosis alone, and every year approximates this, it is not to be wondered at that every way of possible infection must be got at and stopped at its source. Hence the tuberculous milk question plays no small part in the game.

According to Prof. Delepine, of Victoria University, there are over a million and a half tuberculous cattle in Great Britain, and scarcely any investigator puts it down at less than 25 per cent. of the milking herds, whilst Mr. Brittlebank, the Chief Veterinary Inspector for Manchester, estimates the annual loss to dairy farmers in England at nearly one million pounds.

In other countries the same prevails, and in every country the toll exacted is enormous. A bacteriological examination made in 1908 of milk in certain of our biggest cities, including London, Liverpool and Manchester, has demonstrated that tubercle bacilli were detected in one city in 10 per cent. of the samples examined, whilst in Liverpool, owing to the better veterinary inspection of the cattle and farms supplying the city, the percentage was only 3 per cent., and in 1911 this was still further reduced to 1 per cent. The latter, however, is far too great, and although the efficient control of the source of the milk supply of a large city like London is very difficult, it is to be hoped that the new Order, just in force, will make it *nil*.

We can only work, and "wait and see."

MANGE.

Every species of domesticated and many wild animals may become the subject of an attack of mange, always caused by the presence of a parasite, always caught from somewhere, and always contagious to man as well as to other animals. In this instance, as in many others, the parasite does not of necessity find its new host, when transmitted to man, as comfortable and convenient a resting-place as its original host, and as a rule it lives its life but does not propagate.

It is a common and well-known disease of the horse, cow, dog, cat, pig, and camel; foxes, ferrets, and other semi-wild animals; lions, tigers, and most wild animals; besides rabbits, monkeys, and such-like children's pets; and from every variety of animal it is transmissible to man, if only the conditions become favourable.

In the horse we recognise three varieties, and two of them are now scheduled under the Contagious Diseases of Animals Act, and must be reported to the authorities, who deal with them through a veterinary inspector. The different varieties are the sarcoptic, the psoroptic or dermatodectic, and the symbiotic.

The two former, in particular, are transmissible to man, and a certain amount of care is always to be exercised by the attendants who dress the patients, and by slaughtermen and knackers who have to deal with the carcases. Once the diagnosis is established the treatment is generally efficacious, although sometimes prolonged and troublesome. For animals an oily dressing is always the best, and sulphur forms the chief ingredient of most external safe dressings Oil of tar, paraffin, creolin, creosote, and turpentine are all used as adjuncts to oil and sulphur, but their proportion must be adjudicated with discretion, as all are more or less irritating, and the skin of all animals is extremely absorbent.

In the dog, cat and smaller animals we have to use exceeding care, as many cases of poisoning have occurred, owing to their peculiar idiosyncrasy towards certain drugs. For example, it is better not to make use of any preparation containing carbolic or cresylic acid for these animals, and even in a big beast, like a horse, they cannot be used with impunity. Creolin, in all its many advertised forms (although at one time stated to be "absolutely non-poisonous"), and preparations containing mercury, should never be used except under skilled advice, either as a watery or an oily dressing; and to any furry animal like a cat or rabbit the constant use of baths or watery dressings is sure to give a high percentage of fatalities.

Such are some of the difficulties which beset the path of a veterinary surgeon, whose patients vary so greatly in size and temperament, and I touch upon them briefly to show that we have much in common with our medical *confrères*.

Dog and Cat.—That mange in the dog and cat may be transmitted to human beings is a very important fact to bear in mind, and quite recently Dr. Whitfield, the Dermatologist at the Great Northern Hospital, and myself have published in the *Veterinary Journal* (and it was commented on in the *Lancet*) some seventeen authenticated cases in which the disease was transmitted from dogs or cats to their owners, he being responsible for the diagnosis in the human, and I in the animal. I particularly draw attention to this because in none of our cases of the affection in the skin of the owner had any serious thought been given either by the medical practitioner or the owner to the dog or cat, and the disease had been treated unsuccessfully, either as pruritus or eczema. Generally the subjects are women or children, whose affectionate dispositions lean towards the persistent nursing of the dog, some even going to the length of allowing the animal to sleep in the bed—a practice much to be objected to.

The usual site of the disease was either on the upper surface of the arms or around the neck, the infection to the latter place being acquired by the persistent cuddling of the dog, and the former by allowing the animal on the lap, in which situation a dog is continually fondled and stroked, and often develops a habit of resting its head upon the wrist or arm. It is when the arm becomes warm that the transfer of the parasite takes place.

The following is a description by Dr. Whitfield and myself in the *Veterinary Journal* of November, 1912:—

"The symptoms in the human being are shortly as follows:—No part of the body other than the hairy scalp remains unaffected, the whole of the trunk, arms, legs and face being attacked. The eruption called forth by the parasite is essentially vesicular in type. The individual lesion is a very small and rather thin-walled vesicle, rather smaller than the ordinary eczema vesicle and surrounded by a narrow zone of hyperæmia; in fact, the primitive lesion may be described are very like that of varicella, but of only about one-eighth the size. These lesions are always scattered discretely over the surface, and in no case have we seen any grouped or aggregated lesions. The scratching of the patient—for the rash is intensely pruritic—leads to the decapitation of the little vesicles, and their original site then becomes covered with either a serous or a blood-scab. No burrows are found, and hence it is extremely difficult to find the actual parasite. In no instance has this been found in the human subject in our list of cases, though one of us searched with a lens and a pin for two hours in one case.

"In the last case which we saw together the animals spreading the contagion were cats, and the disease in them was not very typical, but the transmitted disease in the human being was sufficiently characteristic to lead to a diagnosis in the cats, and this was confirmed by demonstrating the acarus miscroscopically in a crust taken from one of the cats.

"Nevertheless, owing to the fact that we are unable to find the acarus in the human, it is probably not possible to assert positively that the eruption is due to sarcoptic mange, unless one can confirm the suspicion by the fact that the person has been in contact with an infected animal. Still, for some years now we have not made an error as far as we know, and in all the five cases seen by only one of us the appearance of the rash led at once to the question as to whether the patient had been in contact with a mangy animal.

"The course of the disease in the human being is said to be about six weeks in the absence of treatment, but naturally we have not left a case untreated when once diagnosed. The ordinary treatment for human scabies is quite efficient, and the disease shows less tendency to relapse, probably because the acarus does not form burrows. One rather important point we may note—namely, that in one of the five patients' cases the patient had had the disease three times running at short intervals because his doctor had treated him for scabies and had not inquired about his dog, which was supposed to have 'eczema,' and this, of course, is quite likely to occur if people are not on their guard."

Its presence in man is manifested by a troublesome irritation and papular eruption, with small black spots quite visible at the places where the heads have been removed by scratching.

Mange in the dog and cat is a very common disease indeed, especially in London and large towns where many of these animals are kept.

In the cat is is due to the presence of a sarcopt and principally affects the head and neck first, spreading to the rest of the body chiefly through the agency of the hind limbs, which are used to do the scratching, and a badly affected cat, if not treated, eventually develops into a sorry-looking beast, the head being covered with scabs and scales from which the parasite can be demonstrated microscopically with the greatest ease. In the dog we have two varieties—the sarcoptic and the demodectic—the former due to a parasite of the usual itch variety, the *Sarcoptis canis*, and the latter to the *Demodex folliculorum*. Each has its analogy in the human species, and both are contagious to man, the former especially so.

The *Demodex folliculorum* takes on a most virulent form in the dog, and an animal bady affected loses all its hair, has a very offensive smell, and finally becomes a very loathsome object. Its cure is always a matter of difficulty and is often impossible.

In sarcoptic mange the dog is persistently scratching, especially under the arms and thighs, and when in front of the fire or in a warm room cannot keep still. If neglected the coat falls off, the skin becomes covered with blood-stained scabs, and there is a peculiar "mousey" odour.

I mention these symptoms in more detail to-night because of drawing particular attention to the transmission of the sarcoptic parasite from the dog or cat to owners of these pets; for I feel sure, from what I have observed, that although the fact may be known, it is not suspected as often as it ought to be, and infections and re-infections are common from this source.

Ringworm.

Another common illustration of a skin disease transmitted from animals to man occurs in the case of the various varieties of ringworm of the horse, calf, and dog and cat in particular. Those particularly met with are the ordinary ringworm (tinea tonsurans) and the honeycomb ringworm (tinea favosa).

The former infects all animals, but is of the most importance to us to-night because of its prevalence in horses, dogs and calves. In London we meet with it in the two former animals, and in country districts the ringworm of calves is a common disease. All are contagious to man, and, in so far as animals are concerned, are tolerably easy to cure, the best remedies being either the tincture of iodine or the alcoholic solution of salicylic acid. They require, however, considerable care and thoroughness in application.

I have had personal experiences of its communicability to man from the horse, the calf and the kitten.

ARE MICRO-ORGANISMS THE DEMONS OF THE ANCIENTS?

By JOHN HY. ALEXANDER, M.B., C.M.,

Edinburgh.

Having not long ago read a book entitled "Demonic Possession," by W. Menzies Alexander, I was amazed to find that amongst some very absurd ideas held by the ancients about demons, especially by the Jewish Rabbis, much may be found which would seem in a great measure to anticipate modern science. I am giving in this paper a few extracts about their beliefs, and I hope to show that many attributes of these demons of the imagination are characteristic of what we might call "modern demons." These imaginary demons seemed so real to the ancients that they became a veritable source of terror to the human race, and are so still among uncivilised races. The devils, demons, or agents of Satan (call them by any of these names) of to-day are not only objects of fear, but are really foes (at least many of them are) to mankind. Their presence is either inferred from the effects they produce on living beings, or is shown by ocular demonstration. They live not only in the blood and secretions, but in many tissues and organs of animals and men.

As the ancients imputed most of the ills of life to the influence of immaterial and unseen demons, so do we to-day attribute, if not all, at least the greater part of our ill-health and diseases to the presence in our bodies of what scientific men call micro-organisms. Like the ancients, uncivilised races to-day try, by means it may be of human sacrifices or the offering of paper money and sham rice, as do the Chinese, to conciliate the demons and render them favourably disposed towards mankind. It must not be thought that all the demons were injurious; many, on the other hand, were regarded as good, and were looked upon as harmless or even helpful to the human race.

Demons are mentioned in the Old and New Testaments (Revised Versions) and in the books of the Apocrypha. The early Fathers of the Church:—Justin Martyr, Tertullian, Origen, etc., believed in their existence.

Justin said that demons sow murder, war and all wickedness. Tertullian said that demons produce illness and physical calamities with sudden fits of madness, and, being invisible, their actions are only known by their effects and they enter the blood of animals—wolves, foxes, weasels, birds, and serpents; they also cause plagues, famine, pestilences, and blight of fruit trees.

The Babylonians believed that demons swarmed everywhere, that there was no nook or corner in existence but was filled with them, and they were specially associated with impure places and those of burial. The inhalation or swallowing of stray demons was the cause of disease. The demons were sometimes obliged to contend with dogs over offal. To combat them the great thing was fire, and so they (the Babylonians) put their trust in Gilpil, the god of fire.

The Arabs are said to so thickly people the desert with demons that they apologise when they throw anything away lest they should strike a demon unwittingly. They believe that demons haunt the baths, wells, ovens, ruined houses, market places, and burial grounds.

The Fijians believe they are constantly exhaling and spitting out demons. In China the aid of demons is resorted to for the cure of disease, and by charms and sacrifices they are propitiated.

In his book Professor Alexander says that the doctrine of demons was most highly developed by the Jewish Rabbis; they even had an eye salve which, when rubbed over the eyes enabled one to see the demons, and so brought home the truth of the doctrine to the most sceptical person. They believed that demons, being male and female, propagated their kind, and they said were we permitted to see the malignant spirits which beset us we could not rest on account of them: there would be ten thousand on the right hand and one thousand on the left. Those associated with dirty places were black in colour, while others were blind. He goes on to say that it was believed that demons surrounded men as earthed up soil in garden beds, they were found on unwashen hands. Graveyards were their favourite resorts. Ruined baths were their beloved haunts. The desert was their special home. They might be connected with certain animals as the mad dog, the fly of Egypt, the wasp of Nineveh, the scorpion of Hadabiah, and the serpent of the land of Israel. The night traveller had to brave great perils on account of them. The Lilen were specially dangerous to children who ventured out of the house during the hours of darkness. Under cover of darkness demons surrounded the house and injured those who fell into their hands. Further on in his book, Prof. Alexander says, "The risk of going out to unclean places was very great. Shabrivi was always a menace to those who drank water by night. Chamoth, the demon of oil, caused eruptions on the face. Cardicus, a demon who ruled over wine-bibbers, caused headache. Bath-Chovin was a demon of sickness. Disease in general was caused by demons. Sick women as well as brides, bridegrooms, mourners, and the pupils of the Rabbis were specially obnoxious to the demon of darkness. To demons were ascribed leprosy, rabies, croup, asthma, cardiac disease, epilepsy, melancholy, bodily distortions, mental distractions, and infantile convulsions. They required sustenance, and this they found in certain essences or in the elements of fire and water. Wine was a great abomination to them as well as pungent odours or loathsome smells. The loss of the divine image had rendered man subject to those agents of destruction. Originally he was immune from such attacks. Ablutions, phylacteries, and washing of hands were all protective as well as torchlight. Covenant salt eaten at meals had defensive virtue, so had the application of rouge to the eyes. Circumcision was held in much esteem."

The modern Parsee believes that round the darkhmas, where the dead are exposed to vultures, demons, both male and female, hover around in millions.

If we take these myths and legends about demons and read them over, but with the difference that each time we came to the word "demon" we substitute for it the word "micro-organism," this word produces a marvellous change, and instead of reading over legends we seem to be perusing a modern treatise as disclosed by the results of scientific investigation. For instance, we find that the belief in micro-organisms (demons) is universal.

Haunts.—Micro-organisms (demons) are associated with impure places—wells, ruined houses, and market places, offal, crumbs, drinking water. Graveyards are their favourite resort, and they are found around the darkhmas where the Parsees expose their dead.

Food.—Micro-organisms (demons) feed on the blood and (odours) secretions of their victims; they enter into the bodies of animals.

Diseases set up.—The absence of immunity (the loss of the divine image) has rendered man subject to micro-organisms (demons) of mischief and destruction. They injure those who are susceptible to their influence (fall into their hands), and are specially dangerous to children. Drinking of water is sometimes bad for causing infection (for getting demons). Inhalation and swallowing of microbes (demons) are the causes of ill-health and diseases as plagues, epilepsy, acute mania, eruptions, leprosy, rabies, croup, asthma, infantile convulsions.

Diagnosis.—The microscope (an eye salve) enables micro-organisms (demons) to be seen, and proves their existence to the most sceptical. Microbes causing certain diseases are distinguishable from those causing other kinds of diseases (some demons are black, others blind).

Treatment.—Circumcision is good. Micro-organisms (demons) are rendered harmless to a great extent (propitiated) by ablutions and washing of hands, fumigation (pungent odours and loathsome smells), disinfectants (wine and salt), Röntgen rays, and radium emanations (charms).

The best thing to destroy (combat) them is cremation (fire in the form of torchlight and sacrifices).

Micro-organisms (demons) whose influences are beneficial: these (demons) are resorted to for the cure of disease—this can now be actually experienced in cases of smallpox, hydrophobia, diphtheria, etc.

Some micro-organisms (demons) exist which do good and are beneficial. This we now know is the case, for not only are micro-organisms utilised in many of our most important industries, but in the economy of nature they carry out important functions in connection with the fertilisation of the soil, and without their assistance life would soon cease.

In conclusion, I think it is remarkable that such a close agreement should exist between the ancient beliefs concerning demons and those now held about micro-organisms. Let any person who has studied bacteriology take up a book on demonology, and in perusing the latter he will imagine that he is reading over a modern treatise on bacteria and microbes, provided he substitutes, as has been said before, the word "micro-organism" for "demon." Can such a close agreement between the ideas of the ancients and those of the moderns be simply the result of chance, or is it more likely that the ancients in their crude ideas and beliefs have to a great extent anticipated modern science? This problem I leave with my readers to determine.

OPERATING THEATRES.

GREAT NORTHERN HOSPITAL.

Ruptured Urethra.—Mr. Arthur Edmunds operated on a boy, æt 12, who had been admitted with a history of having been knocked down by a motor-car. Apparently the car, which was going very slowly, struck him on the symphysis, and then one of the front wheels passed across the pelvis. The exact way in which the accident occurred, however, was a little uncertain.

On admission the boy was collapsed, there were a few scattered wounds about the head and face, and some abrasions on the thigh. On examination of the pelvis the iliac crests seemed a trifle loose, and any movement of them or of the ischial tuberosities caused pain. A skiagram was taken immediately, and it showed a fracture of the pelvis through the rami of the ischium and of the pubes on both sides, the symphysis being driven backwards. There was no escape of blood by the urethra, and there was a history that the boy had attempted to pass water but was unable to do so. A soft catheter was passed its full length, but drew off no urine. On withdrawing it, however, its eye was found to be filled with clot. The ease with which the catheter passed suggested that there was a rupture of the bladder. Accordingly the child was anæsthetised two hours after the accident, and prepared for operation. Under the anæsthetic it was possible to make out a swelling in the region of the bladder. The ordinary supra-pubic incision was made, but as it was a little difficult to identify the bladder a steel sound was passed again with the greatest ease. On cutting on to this, however, the bladder was opened without exposing the sound, a few drops of clear urine escaping. It was obvious, therefore, that the bladder had not been injured. The soft catheter and the sound had been passed into the loose cellular tissue behind the bladder. The patient was now put in the lithotomy position and the urethra exposed in the perineum. It was found that the urethra had been completely torn across; but its vesical end could not be found. A metal sound was therfore passed from the bladder into the perineal wound and a soft catheter passed down from the meatus through the ruptured distal end. One end of a thread was then tied round the tip of the soft catheter and the other end passed into the sound.; the soft catheter was next dragged into the bladder by means of this thread. The cellular tissue around the base of the bladder was found to be extensively lacerated, forming a cavity into which the instruments had passed at the first examination. The urethra was then sutured round the catheter, the two ends of which, one emerging from the meatus, the other from the supra-pubic wound, were next tied together, so as to keep the catheter in place. The perineal wound was then packed with iodoform gauze; the displacement of the symphysis was restored; the wound in the bladder was partially closed, a supra-pubic tube being left in; the lacerated cavity was also drained by one tube on each side of the bladder; the supra-pubic wound was then partially sutured, room being left for the tubes; and finally, dressings were applied.

Mr. Edmunds said the interesting points of the case were, first, the way in which it simulated rupture of the bladder, which was much more likely to have happened, and, secondly, the difficulty of finding the upper end of the urethra.

A week later the catheter was cut and drawn down so that the end lay in the bladder. Ten days after the operation the condition was that the wounds were all healing, the perineal wound being practically closed. The temperature and pulse had remained normal, and the boy had once passed water naturally.

Mr. Edmunds considered that the reason the patient had done so well was entirely due to the fact of the operation having been done at once, before any extensive infiltration of urine had taken place.

SPECIAL REPORTS.

THE SEVENTEENTH INTERNATIONAL CONGRESS OF MEDICINE, LONDON, 1913.

CONCLUDING NOTICE.

The Medical Exhibition.

Special mention must be made of the magnificent exhibit of the products of Messrs. A. Wulfing and Co., of 12, Chenies Street, W.C. The fact that the Grand Prix of the Congress was awarded to Sanatogen—the only Grand Prix awarded in the food section—speaks for itself. The reputation of Sanatogen has been steadily built up upon a sterling basis of real clinical worth. Other exhibits of the same firm were formamint, albulactin, and a new preparation of hexamethylene-tetramine and sodium acetate known as cystopurin, which has already been favourably received by the profession in cases of infective conditions about the urinary tract.

The Saccharin Corporation, Ltd., were showing their pergenol, a solid compound of hydrogen peroxide, dissolving immediately in water to make a neutral solution of hydrogen peroxide and boric acid. Other interesting exhibits by the same firm were novocain; trivalin, a nerve tonic and anodyne; and dry diamalt, a British-made extract of malt in a crystalline powder.

Surgical Instruments and Apparatus and Miscellaneous.

An interesting exhibit was furnished by Messrs. Allen and Hanburys, Ltd., who were showing various instruments for the surgical treatment of fractures by Sir Arbuthnot Lane, Bart., and others. An improved irrigator stand by Mr. Canny Ryall, F.R.C.S., was also shown.

Invalid chairs and couches were shown by Messrs. John Ward, Ltd., 246, Tottenham Court Road, W. A comprehensive collection of bedsteads and cots for wheeling-out, as well as hospital lockers, was exhibited by Messrs. J. Nesbit-Evans and Co., of Birmingham. Optical instruments and sphigmographs were represented by the exhibits of George Spiller, Ltd.; Carl Zeiss (London), Ltd.; F. Leitz; Bruce Green and Co.; and John Weiss and Son, Ltd. A large assortment of surgical instruments were shown by Messrs. Mayer and Meltzer, the Medical Supply Association, Messrs. Hawksley and Sons, Messrs. Reynolds and Branson, Ltd. (Leeds), and the Holborn Surgical Instrument Co. Incubators for bacteriological work were exhibited by Messrs. Chas. Hearson and Co., Ltd.; Carl Zeiss (London), Ltd.; and Mr. R. B. Turner, 11 and 12, Foster Lane, Cheapside.

Of X-ray and electrical apparatus there were numerous exhibits of a costly and elaborate type, among which may be mentioned those of the Sanitas Electrical Co., Ltd.; the Veifa Works (Frankfort, a.M.); Siemens Bros. and Co., Ltd. (Westminster); Messrs. Schall and Son, New Cavendish Street, W.; and Messrs. Gaiffe (Paris), represented by the Medical Supply Association. Radium, Ltd., of 93, Mortimer Street, W., were showing their drinking and inhalation apparatus. Dr. Jaeger's Sanitary Woollen System Co., Ltd., and the Dr. Deimel underwear were each exhibiting their well-known specialities in clothing. The "Hopwood Baby Tether" was a capital device for keeping children safe and comfortable in cots and perambulators, and was shown by Messrs. John Bell and Croyden, Ltd., of Wigmore Street, W. The principal medical publishers were well represented, among whom may be mentioned Messrs. Adlard and Son, Mr. Edward Arnold, Messrs. Bailliere, Tindall and Cox, Messrs. Cassell and Co., Ltd., Messrs. Henry Frowde and Hodder and Stoughton, Mr. H. K. Lewis, Messrs. J. B. Lippincott Co., Messrs. Rebman, Ltd., and Messrs. W. B. Saunders Co.

Other awards to exhibitors than those already mentioned were to Messrs. Wulfing and Co., London, the Grand Prize in the Food Section for "Sanatogen"; a gold medal to Messrs. Southall Bros. and Barclay, of Birmingham, for their new food tonic, "Vitafer"; and a gold medal to the Ronuk Company for their sanitary floor polishes and appliances.

MEDICO-MECHANICAL TREATMENT IN ENGLAND.

Treatment by means of medico-mechanical appliances, as carried out in the so-called "Zander" institutes, has, for some inscrutable reason, never become popular in England, though it is employed extensively on the Continent and in America. Speaking generally, it may be said that the various apparatus are designed to carry out, by mechanical means, the various movements and manipulations embodied in the Swedish system of physical treatment. This treatment is of the greatest value in restoring the function of joints disabled in consequence of injury as well as in chronic joint affections due to disease. The treatment, however, is not limited to these, for it is also advantageously applied in secondary muscular atrophy and in certain forms of paralysis, neuritis, and neurasthenia. In the more purely medical domain, treatment by regulated movement is brought to bear in diseases of the heart and respiratory organs, constituting, as it does, a method of cardiac and respiratory gymnastics. It is plain, therefore, that medico-mechanical treatment has a wide field of application, adjuvant to the ordinary medical and surgical measures. Two or three years since, Mr. Edgar Allen, of Sheffield, a large employer of labour, having himself derived great benefit from the use of the Zander apparatus abroad, founded a perfectly equipped institution of the kind in that town which he placed at the disposal of the medical profession in the sense that cases were only admitted for treatment on the recommendation of a medical practitioner. Not content with organising the institute, which bears his name, he generously provided funds for carrying it on for three years, hoping that at the expiration of that period its value would have become sufficiently apparent to induce employers of labour and insurance companies to make financial arrangements for its being carried on. The second annual report, which has just been issued, shows indeed that the working classes fully appreciate the advantages thus rendered available, upwards of 150 cases being treated daily. The time is now approaching, however, when arrangements will have to be made to provide the necessary funds to enable the institution to continue its beneficent work. In private hands it could easily be made a paying concern, but as the object of its foundation was to benefit the working man, no plan which would deprive them of access would be acceptable to its generous founder. It is to be hoped that the public spirit of employers of labour and others will induce them to take this question in hand. It would not be fair to expect the founder, who has already expended many thousands of pounds in fitting it up and keeping it going, under the superintendence of a medical officer, to bear the burden of its maintenance indefinitely. It lies with the Sheffield Press to make its claims known and to render its continuance possible.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug 23rd, 1913.

At the Congress for Laryngology, Hr. Kilian, Berlin, spoke on

The Occurrence of Accidental Infections after Clearing Out the Antrum of Highmore.

He said that when an old deposit of pus in the antrum, either through the natural opening in the mouth or through a puncture, even when the part was washed out with a sterile saline solution, it often happened that in a few hours there was a moderate rise of temperature. Sometimes the rise was preceded by a rigor. The temperature might even be as high as 39° C. This lasted generally at most a few hours. The day following the patient generally felt quite well. These occurrences were usually observed only at the first washing out. Plainly the whole chain of symptoms was the result of absorption of bacilli through the mucous membrane of the antrum, and not the result of infection. A case deserving of mention was one in which the sight of the eye of the corresponding side failed completely, but the disturbance passed off quickly, although the pupil of the eye remained dilated for several days.

The vagus reflexes observed in some sensitive individuals, after washing out of the antrum, were interesting at times. Slowing of the pulse, fainting, and very rarely sudden death had been observed. A case of the latter kind occurred in the speaker's polyklinik a few years ago. It could not be ascertained that the fluid with which the washing out was done was cold. The autopsy revealed nothing, and nothing special could be seen about the heart.

At the Gynæcological Congress, Hr. Klein, München, spoke on the

Röntgen Treatment of Myomata and Fibromata of the Uterus.

From May, 1911, to March, 1913, 46 cases of myoma and 35 of fibroma had been treated by Röntgen rays. The principles on which the treatment was carried out were not to send more rays into the body than were actually required for the treatment of the case. With from 50 to 100 X in from two to seven series the desired amenorrhœa or oligomenorrhœa had been successfully achieved. They had only noticed a passing reddening once, otherwise no bye-effects whatever. Another principle they had carried out was always to operate in young women with myomata rather than Röntgenise. Here it was certainly justifiable to remove the myoma and leave not only the ovaries but every millimetre of sound corpus and cervical tissue. The troubles of the menopause might be exceedingly troublesome and very persistent in young women. One third of their myoma cases that had been operated on still menstruated. Of the patients treated up to March last most had already become amenorrhœic. He had already stated elsewhere that they always operated where there was a suspicion of malignancy or that a myoma was degenerated. In common with all other authorities they had the best results in cases of fibroma. Of the 35 cases of that class there had not been a single failure.

Hr. Theilhaber spoke on the

Influence of the Climacteric on the Development of Carcinoma of the Genitals.

He said that the tendency to carcinoma of the genitals was in inverse proportion to the amount of cells contained in the connective tissue and the degree of vascularity. The basis of this was a disturbance of the equilibrium between the epithelial and connective tissue cells. The epithelial cells could then pass more readily when older disease processes had been present so that the poverty in cells and the low degree of vascularity of the connective tissue such as cicatricial tissue and chronic inflammations were contributory. From a therapeutical point of view these considerations and also the practical experiences of the speaker, the indication was to strengthen the constitution as much as possible, and set up a cyclical hyperæmia of cicatrices by means of cupping glasses, massage, diathermia, injections of uterine juice, etc. In the treatment of carcinoma itself it appeared rational to put all these methods into practice—the hyperæmisation and the excitation of round-celled inflammation. Here were also in place diathermia, combined with Röntgenisation, radium, or mesothorium, cholin, uterine extract, etc.

Hr. Kroemer, Greifswald, spoke on the

Action of Mesothorium on New Growths of the Genital Organs.

He said that although the results were not gratifying in very advanced cases, they had been much so in nine cases of cancer of the cervix that had appeared to be hopeless, as they had allowed total extirpation to be performed later on. Similar good results had been seen in some few cases of cancer of the body of the uterus, one with vaginal metastasis, and above all, in rodent ulcer of the vulva. In all cases that came to operation the cicatrix was treated by mesothorium two to three hours a day during convalescence. The amount of radiation lay between the following limits: The cases of cancer of the cervix, 3,000 to 7,000 mg. hours supported by X-rays in which every 10 to 11 days up to 100 were made use of. At the same time the patients received thorium X by the mouth—100 e.s. E. Aqueous solutions were also made use of. Absolute cure in which the disease was wholly cast off was only met with in two cases. In most of the cases, advancing disease was still demonstrable in the deeper-lying layers of tissue. Mesothorium treament in combination with deep Röntgen treatment promised permanent recovery in all external forms of the disease, the portio vaginalis, the vagina and vulva. It supported the operative treatment in so far as in improved inoperable cases it at least removed the putrefaction and the fœtor.

HUNGARY.

Budapest, Aug. 23rd, 1913.

At the recent meeting of the Interhospital Association, Dr. B. Kovàcs read a paper on

Surgical Intervention in Renal Disease.

He said that no branch of surgery has received such tremendous impetus of late years as this. He divides the subject into three heads, intervention in acute nephritis, in chronic nephritis, and finally in certain essentially medical affections of the kidney itself. The acute conditions, which are further sub-divided into those arising from ascending infection, those of a circulatory type, and those of mixed type, are discussed with admirable clearness and the effect of various treatments indicated. Dr. Kovàcs seems absolutely just in his treatment of the two opposing theories or technics, as they should more rightly be called, of decapsulation and kidney incision. He traced the steps by which Pousson reached his conclusions as to the efficiency of renal section, and shows to what a degreee they resemble the steps by which Edebahls arrived at a very similar conclusion in regard of decapsulation. The review of decapsulation literature has convinced the reader of the advantages of this method. As to the choice between the Pousson or the Edebahls operation, he said, that in considering the two, the brilliant researches of the English surgeon, Harrison, should not be forgotten. To this early observer the tense capsule of the congested kidney of acute nephritis bore the same relation to that organ as the iris to the eye in cases of glaucoma. Furthermore, in the opinion of the reader, although decortication does not appear to present either great technical difficulties or to entail serious post-operative complications, it is, nevertheless, well to recollect that it constitutes in every case a somewhat more difficult intervention, and one certainly more grave in its possible sequels than simple section of the kidneys. A further and even greater objection to decortication would appear to be that its benefits do not begin to show themselves until at the end of eight or ten days at the minimum, whereas, on the other hand, Pousson's nephrotomy gives immediate results. Continuing, he said: It is essential to remember that the very principle of the technic of decortication has been brought under very severe criticism from a histological standpoint, it having been shown that the supposed increase of vascularity between the parenchyma of the kidney and the perirenal tissue probably exists either to a very small extent or else not at all. The good arising from decapsulation, then, must be attributed to a release of the endonephritic tension, or else to a stimulation of the reflex renal nervous system. Accordingly, the conclusion is that, in the present status, no positive choice can be made between decapsulation and nephrotomy in the treatment of chronic nephritis.

On the Ætiology of Eczema.

Dr. A. Roth said that despite of all that has been written and said about eczema, the ætiology of this most common skin disease is still obscure. Dr. Roth cannot share the view of Unna, that eczema is primarily a parasitic disease, for the vesicles of the early stages have time and time again been proven sterile, and even inveterate cases will sometimes heal with treatment which is directly opposed to all rules of asepsis. Most likely a specific predisposition combined with a local or general irritation are the underlying causes, and more good can generally be accomplished by antiseptic local dressings. There is a distinct relationship between the skin and the internal organs; thus an eczema of the head, when treated energetically, will sometimes be followed by compensatory hyperæmia of the brain, manifesting itself in convulsions, and an intercurrent attack of diarrhœa will frequently improve an eczema of the body.

Treatment of Chronic Eczema.

Prof. Havas recommends the following prescription in cases of old standing, obstinate eczema:—

Oxidi borici }
Zinci oxydati } aa. grammata, 10.0
Solve in glycerine qu. s.
Add
Unguenti Diachyli }
Vaselini } aa 45.00 grns.
N.D.S. To be applied under dressing.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

Local Medical Committee.

A meeting of the Local Medical Committee for the County Borough of Belfast was held in the Medical Institute on the 15th inst., Mr. R. J. Johnstone, F.R.C.S.Eng., presiding. The resolutions passed at the Delegates' Meeting, held in Dublin on the 17th July, were unanimously approved and adopted. Mr. Johnstone, Dr. T. A. Davison, and Dr. Stanley B. Coates were elected to represent the committee on th Irish Medical Committee recently formed. The profession in Belfast are determined not to accept service under the Insurance Act so long as the Chancellor of the Exchequer ignores the demands of the Irish medical profession for improvements in the working of the Act.

Visit of German Doctors to Belfast.

A party of German doctors numbering with their wives about 200, after attending the International Congress in London, have been making a tour round the United Kingdom in the Hamburg-American steamer, "Kronprinzessin Cecilie." The party paid a short visit to Belfast on the 21st inst., and were entertained by the Lord Mayor, Mr. R. J. McMordie, M.P., who had invited a number of medical men and others to meet the visitors. Refreshments were served in the large hall of the City Hall at 6.15 p.m., and the visitors, who could only stay a short time, were shown through the building. The Lord Mayor in the course of a short speech welcomed the visitors to Belfast and emphasised the importance of such meetings as tending to foster the most cordial feelings between the two great nations represented. He referred to the attention paid by the German empire to the matter of education, and congratulated them on the advances made by their great Empire in this as in other respects. Dr. Koenig, of Berlin, acted as interpreter for those not sufficiently acquainted with English. Professor Glax, Abbazia, Austria, in replying, thanked the Lord Mayor and other citizens of Belfast for the great kindness shown to them during their all too brief stay in Belfast, and promised a very cordial reception to any citizen of Belfast should he at any time find himself in the speaker's country. Sir Otto Jaffé, an ex-Lord Mayor of the City and now German Consul, in a lengthy speech in the German language referred to the vast progress that Belfast had made not only in regard to population and industries, but also in relation to educational, philanthropic and other institutions which made for the betterment of the community. He referred to the Royal Victoria Hospital, the Purdysburn Asylum, the Abbey Sanatorium and other institutions, and paid a fitting tribute to Sir Wm. Whitla, who had erected the Medical Institute in College Square for the benefit of the members of the medical profession. The party shortly after embarked on their way to Dublin.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents]

A DOCTOR'S WIFE ON DRESS.

To the Editor of The Medical Press and Circular.

Sir,—Women have their rights—some belong to them, some they assume. One of the latter is that of having the last word in an argument. Up to the present "mere man" has, no doubt, been highly entertained by this discussion, in which he has not ventured to join. But braving the presumption of breaking the spell, I am audacious enough to believe that "mere man," with all deference to his sisters, is still entitled to express his views upon the subject. First women must admit that their fashions in dress are always matters of extremes. In early Victorian days women did everything possible to conceal the fact that they were bipeds, by enveloping their bodies in skirts and petticoats balloonly distended with crinolines. Then many of us can remember the days of that curious supplement to their anatomy, technically named the "bustle." This was succeeded by a remarkable contrivance, constructed in the form of a wire cage, known as the "improver." This waggled about from side to side as they walked, and so left the true anatomy of their proportions to nebulous speculation. We all know what since has followed. The present fashion—it will not stay—is to reveal every lineament of a woman's figure—just the very opposite of that which the fashion of the crinoline subserved. "Mere man" looks on, is amused, and wonders what next will happen. His susceptibilities are hardened enough to believe that if a woman is persuaded that her gluteal muscles are of shapely proportions, she is entitled to exercise her right of letting everyone see how they contract if she likes. The only point in the case is the extreme of her decision which fashion has dictated. But fashion is no respecter of persons, and so women generally dres alike—and their dress is designed by no means for the benefit of "mere man" alone, but to a large measure to compete, for attraction, among themselves. This nudity craze, therefore, had better be left to settle itself—just as the crinoline monstrosity did—and the hirsute appendage, that Victorian abnormality, the chignon, which often seemed ponderable enough to give a woman's head a posterior "list." After the public exhibition of the lineaments of their figures, women will doubtless turn their attention to the last resource of their natural gifts—namely their hair. In the near future we may expect to see a neat development of fashion in this direction. The hair may come to be worn in all its pristine and attractive beauty, compelling admiration, despite the elevation of prudish fans employed to conceal the dazzle of its adornment. This letter may appear too cynical in respect to women's foibles, but it is not intended to be so. Logically we must admit that if Nature has designed woman intentionally with an eye to artistic effect—and this we may believe—it is not curious that a woman should refuse to hide her talents under a crinoline or anything else to which the law does not object.

Yours, etc.,
DOCTOR'S WIFE'S HUSBAND.

DR. EWART ON THE APEX TREATMENT OF CONSUMPTION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—There can be only one opinion among your readers as to the value of the series of papers on "Apex Treatment for Pulmonary Consumption," which Dr. William Ewart has been contributing to your pages. I have read them with intense interest, and I am preserving them on the file that I keep for the purpose in similar instances for later reference and study. I am certain I am voicing the wishes of your subscribers when I offer our thanks to Dr. Ewart for his scientific, suggestive and practical contribution to the ætiology and treatment of phthisis. It is to be hoped that we shall hear more of the "treatment by unilateral breathing," but as the author wisely remarks, "This is a double-edged weapon. The art of its safe and successful use will have to be studied clinically." This has hitherto been the test by which previous theories have had to stand or fall, and if the author's views pass this test successfully he will have achieved much where others have failed, and we can then hope that he will not fail to put them into the more permanent book form which they will in such case fully deserve.

I am, etc.,
SENEX.

London, W.,
August 22nd, 1913.

OBITUARY.

MR. W. WHITEHEAD, OF MANCHESTER.

WE regret to announce the death of Mr. Walter Whitehead, F.R.S.E., the well-known Manchester surgeon, which took place on the 19th inst. at Colwyn Bay, aged 73. The deceased was educated at Altrincham and Ripponden, and at the age of sixteen he entered his father's bleaching business. This proving uncongenial, he soon left it, and, having borrowed enough money to pay his lecture fees, he entered the Chatham Street School of Medicine, Manchester, unknown to his parents. While still a student he followed the custom of the day and was apprenticed to two doctors in partnership at Bury. He qualified in 1864 by taking the L.S.A (London), and the L.F.P.S. (Glasgow), and the L.M. (Edinburgh). In 1866 he added the F.R.C.S. of Edinburgh. Mr. Whitehead then purchased a practice at Mansfield Woodhouse, Notts, where he stayed until 1867. Returning to Manchester Mr. Whitehead was, first, honorary surgeon to the St. Mary's Hospital for Women and Children (1868), and then honorary assistant surgeon to the Manchester Royal Infirmary (1873). He remained on the staff of the latter institution until 1900, when he retired, having reached the age limit of 60. For a time he was professor of clinical surgery and examiner in the Victoria University of Manchester. He was, however, not a good lecturer, being a much better exponent of his profession to senior and qualified men at the bedside. He was also honorary surgeon to the Manchester Lock and Skin Hospital and to the Christie Cancer Pavilion, and was mainly instrumental in the foundation of the Manchester Hospital for Diseases of the Skin.

Mr. Whitehead wrote many papers, more or less original in nature, for medical journals, those best known being descriptive of the two operations which brought him world-wide renown. These were for removal of the tongue and for removal of hæmmorrhoids. Both of the operations were characterised by the use of blunt-pointed scissors for the cutting stages. In his hands, and also in those of other surgeons who carried out his instructions carefully, the operations were, and still are, very successful, and they are described in all standard works of surgery, and referred to as "Whitehead's Operations." Originality was a characteristic of his family, whose members included the inventor of the Whitehead torpedo, and John Kay, the inventor of the fly shuttle. He also wrote the articles on "Affections of the Mouth" and the "Surgery of the Thyroid Gland" in Treves's "System of Operative Surgery" (1885). When the British Medical Association visited Manchester in 1902 he was unhesitatingly selected as its president, and the unanimity of the choice is the best possible evidence of his professional position and personal popularity. For many years of his life yachting was Mr. Whitehead's hobby, mostly at Windermere, where he was Commodore of the Royal Yacht Club in 1889. When he retired from active work he lived chiefly at Colwyn Bay, where he bought a good deal of property, including the local landmark known as Flagstaff Hill.

DR. L. EASTWOOD, OF DARLINGTON.

THE death took place on the 11th inst., at his residence, Brookside, Darlington, of Dr. Lewis Eastwood, J.P., aged 62. The deceased, who qualified as L.R.C.P. and S.Edin., and L.S.A.Lond., in 1877, was a native of Illingworth, near Halifax. He came to Darlington in 1871 as assistant to the late Dr. Howison, of Grange-road, and six years later began to practise on his own account. For sixteen years he was surgeon to the Darlington Hospital, but had to resign that position owing to pressure of work. Over a very long period he was surgeon to the Darlington Police Division, and he had also held appointments in connection with some of the large works of the town, notably the Forge. He was a familiar figure about the town, usually with his bicycle, for he was an ardent cyclist.

The late Dr. Eastwood rendered admirable service to the municipal life of the town. He first opposed the late Mr. Green in the North Ward, but without success, and when a vacancy occurred in that ward owing to the elevation of Mr. Green to the Aldermanic bench Dr. Eastwood proved successful over Mr. John Robinson, though the latter had not long to wait before he entered the Council. It was in the work of the Health and Sanitary Committee that Dr. Eastwood threw his heart and soul, and his medical knowledge in this department stood him in good stead. In 1910 he was elected Mayor of Darlington, and ably assisted by Mrs. Eastwood as Mayoress he carried out the duties during a year which included the coronation of King George with much acceptance, entering heartily into the festivities associated with that occasion. He was also a member of the Advisory Committee appointed to advise the Lord Chancellor in the selection of magistrates. An enthusiastic musician, he was associated with the Darlington Orchestral Society for twenty years, and occupied a place in the orchestra as a violinist. He had an interesting collection of violins by famous makers, which he delighted to show his friends. Dr. Eastwood was a Churchman and a Unionist, and for nearly 30 years he was a Freemason, being a member of the Marquis of Ripon Lodge. Dr. Eastwood was twice married.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Treatment of Uterine Hæmorrhage by Röntgen Rays.—Pfahler (*Amer. Jnl. Obs.* lxvii., 5) gives a series of cases treated by this method, and says that Röntgenotherapy is the method of choice for the control of hæmorrhage in patients approaching the menopause, in whom carcinoma can be eliminated. It is not the method of choice in cases under 40 years of age. It can be recommended in all cases at any age where operation is contra-indicated. For the differential diagnosis, in order to determine the indications for this treatment special skill in gynæcology is required, and for the proper administration special training in Röntgen therapy is necessary. The advantages are painlessness, avoidance of shock of operation, preservation of internal secretion; moreover, it does not interrupt the usual habits, confinement in hospital is avoided, it is without risk in the hands of a skilful operator, the menopause is brought on gradually when necessary, and the amount of treatment can be graded to the needs of the patient. The disadvantages are—the prolonged course of treatment that is usually necessary; there is danger to the overlying tissues if the rays are not properly applied. The treatment is more expensive than operation. F.

Menstrual Molimina.—Chesholm (*Jnl. Obs. and Gyn. Bt. Emp.*, xxiii., 5) from the records of 500 girls who had commenced menstrual life concludes that the majority of girls commence menstruation painlessly, that a number have discomfort, some occasionally, some regularly, for a time varying from one hour to two days, just before and with the commencement of the menstrual period. This discomfort is often slight in character. A few have more severe pain, either regularly or occasionally; a very small number are incapacitated; a small number, 1.2 per cent., have discomfort or pain for a longer period than one or two days during the whole of menstruation. The discomfort in girls is most frequently local, and when there is general disturbance it is accompanied by severe local pain and probably proceeds from some local abnormality, congenital or acquired. The best developed girls appear less likely to have disturbance. The percentage in chlorotic girls is higher than the general average. The freedom from discomfort is not affected by hard mental work carried on under healthy conditions. F.

The Pathology of Uterine Casts passed during Menstruation.—Bell (*Jnl. Gyn. and Obs.*, xvi., 6) hopes to prove that it is an erroneous idea that menstrual endometrial casts are the product of conception, although abortions do occur and may be confused with true menstrual casts. Casts may be divided into—(1) True blood casts of the uterus; (2) thick casts; (3) thin casts. With regard to the difference in thickness this is considered to be due solely to the depth of the endometrial denudation. The menstrual decidual reaction prevents the blood breaking through easily, and consequently the menstrual blood strips up the superficial portion of the endometrium instead of passing through it. From a study of specimens there is a distinct difference between the decidua-like change in the cells of the stroma and that of pregnancy, and there is a marked effusion of blood serum amongst the cells which is not seen in the decidua of pregnancy. F.

Thread-worms in the Peritoneal Cavity simulating Meningitis.—Whitelocke (*Brit. Journ. of Children's Diseases*, July, 1913) records the very remarkable case of a girl, aged five and a half years, who was admitted to hospital with the diagnosis of tuberculous meningitis. The child was very ill on admission to hospital, having a temperature of 102.4° F. and a pulse of 112. She had marked converging strabismus, with contraction of both pupils and some photophobia. There was a history of an enlarged gland having been removed from her neck a year previously, after which she had appeared well till the present illness, which set in somewhat suddenly thirty-six hours before her admission to hospital. Since that time she had vomited frequently, screamed a good deal, refused food, and had incontinence of urine. For two days after admission to hospital she remained in much the same condition, picking at the bedclothes, being very restless, and wetting herself more frequently. Whitelocke then noticed that though she tossed about in bed she continuously kept her right leg rigid and more or less flexed on the abdomen; the left leg she moved freely. Careful examination of the abdomen revealed some rigidity of the right rectus muscle, and even gentle pressure in the region of the cæcum caused her to call out loudly. The abdomen was then opened and an inflamed process of omentum was found attached to the cæcum, covering it and the appendix completely. On removing this omentum a nest of about a dozen dead thread-worms was found, and a small pin-hole perforation was found in the appendix on its mesial aspect, about three quarters of an inch from its distal extremity. Through this perforation a living thread-worm was seen wriggling. The appendix was then removed, and careful search revealed the presence of seven more worms free in the cavity of the peritoneum. When the appendix was opened it was found to be crammed full of worms of all sizes and ages, and the mucous membrane was considerably ulcerated, especially in the neighbourhood of the perforation. After the operation the nervous symptoms and sickness quickly disappeared and the child made a complete and rapid recovery. K.

Anterior Poliomyelitis.—Hazen (*New York Med Journ.*, July 12th, 1913) discusses the treatment of this disease and comes to the following conclusions. In order to prevent infection, attention should be paid to the hygiene of the mouth and throat. The careful use of the tooth-brush and a non-irritating douche and gargle should be regularly attended to; menthol preparations being recommended for antiseptic purposes. Complete rest is essential in the acute stage of the disease, and the avoidance of fatigue is of the utmost importance during convalescence. In the after treatment "prosthetic appliances, passive motion, massage, electricity, hydrotherapy, mechanical vibration, and exercise" are strongly recommended. The prevention of deformity, the keeping up of function and growth in the damaged members, with re-education of nerve and muscle are important factors in success, and should be continued even after the adoption of suitable surgical measures. K.

Administration of Extract of the Pituitary Gland.—Musser (*Amer. Journ. Med. Sciences*, August, 1913) records the results of an investigation undertaken in order to study more particularly the effect of pituitary extract upon the blood pressure when administered by the mouth over a more or less prolonged period. Eighteen individuals were given the dried extract of the whole pituitary gland without other medication. It was noticed that the administration of extracts of the gland exerts a distinct pressor effect on the peripheral vascular apparatus, which persists for an appreciable time after discontinuation of the drug. This is apparently the only consistent effect following continued administration of the gland by the mouth; other results are variable and indefinite. K.

Duodenal Ulcer in Infancy.—Schmidt (*Med. Review,* July, 1913) reports that during the past seven years 20 cases of fatal duodenal ulcer were discovered *post mortem* among children less than a year old. This represents 1.8 per cent. of the necropsies at that period of life. The writer concludes that duodenal ulceration is more common during the first year of life than at any other period. The reason why this observation has not previously been made is that duodenal ulcer is chiefly treated by the surgeon, and the general health of infants with this condition is usually too bad to warrant an operation. In the majority of the writer's series the infants were emaciated. Some suffered from purulent inflammation, phlegmon or digestive disturbances due to rickets, whooping cough, tuberculous meningitis. In no case had the infant suffered from burns of the skin. The diagnosis of duodenal ulcer in infants is seldom made before a fatal hæmorrhage from the rectum or mouth occurs. Only in two of the writer's series was the disease discovered during life. In fourteen cases no symptoms pointed to this condition. Though one necropsy showed a healed scar in an infant, the writer considers that recovery from duodenal ulcer in early life is most exceptional. S.

Three Unusual Cases of Renal Tumour.—Joly (*Practitioner,* August, 1913) reports the operative treatment he employed in the radical removal of kidney tumours. A case of hypernephroma and one of primary cancer of the kidney made excellent recoveries, and remained well, without any sign of recurrence about two years after the operation. The third case, also of hypernephroma, lost so much blood before he would consent to operation, that a fatal termination occurred. The writer removes the fatty capsule unopened with the kidney enclosed, in each case. He describes the following incision and procedure which gave him very good access to the malignant renal growth. The vertical limb was five inches long and parallel to and immediately outside the left linea semilunaris, its centre being opposite the umbilicus. The tumour was palpated through this opening and proved to be renal in origin. The pedicle was free from induration and there were no glands along the aorta. The peritoneum was closed, and a long incision made from the centre of the first one outwards and slightly upwards to a point about an inch below and in front of the tip of the last rib. The peritoneum was exposed in the anterior part of the incision, and the perinephritic fat in the posterior. The peritoneum was raised from the front of the tumour, and retracted inwards towards the middle line. Next the hand was insinuated behind the fatty capsule, which was separated from the muscles of the lumbar fossa. Finally the kidney (enclosed in its fatty capsule) was completely freed from all its connections, except those on its inner aspect. The ureter was divided just above the brim of the pelvis. The tumour was retracted strongly outwards, and the tissues separated from the side of the aorta. This dissection was made from below upwards. When the renal pedicle was reached, it was clamped and divided, as were also the capsular vessels. The tumour was thus completely freed and removed out of the lumbar fossa. It weighed 3¾ lbs. The patient made a good recovery and gained 4 stone in weight. In spite of the pain due to this the abdominal wall remained quite firm, and there was no evidence of recurrence a year and nine months later. S.

MEDICAL NEWS IN BRIEF.

Visit of German Medical Men to Dublin.

Last Friday morning one hundred and fifty German physicians, accompanied by seventy ladies, arrived in Dublin. They came from Belfast to Kingstown in the 9,000 ton vessel, the "Kronprinzessin Cecilie," of the Hamburg-American Line. On landing from their ship, the party were conveyed in special tramcars to Dublin. The first institution they visited was Trinity College. Here they were received by Professor A. F. Dixon, who conducted them through the Medical School, the Library, the Chapel, and others of the College buildings. Leaving Trinity College, the party divided into five or six detachments, and in open wagonettes drove round to see the show places of the city. A party of twenty went in motor cars to the Peamount Sanatorium, at the invitation of the Countess of Aberdeen. Another visited the Rotunda Hospital and the Mater Misericordiæ Hospital, and returned by the Richmond and Whitworth Hospitals to Christ Church Cathedral, the City Hall, Dublin Castle, St. Patrick's Cathedral, and the Royal College of Surgeons. A third section of the tourists drove over O'Connell Bridge, along the North quays, past the Four Courts to Kingsbridge, past Steevens' Hospital, to Guinness's Brewery, returning by Christ Church Cathedral, St. Patrick's Cathedral, to the Royal College of Surgeons. The fourth tour was from the College up Grafton Street, Nassau Street, Kildare Street, to the National Museum and the Library, which they inspected with keen interest. They also visited the National Picture Gallery and the collection of Irish National Portraits, and then proceeded to the College of Science, took a glance at the buildings of the National University and the Municipal Gallery of Modern Art, Harcourt Street. At one o'clock the entire party assembled at the Mansion House, where, by permission of the Lord Mayor, luncheon was served by Mr. Mills, caterer, Merrion Row. The Lord Mayor was unable to be present, because at that time he was presiding over a special meeting of the Municipal Council in the City Hall.

After luncheon carriages conveyed the visitors from the Mansion House to the Royal Zoological Gardens in the Phœnix Park. They walked through the Gardens to the Viceregal Lodge, where the Lord Lieutenant and the Countess of Aberdeen gave a garden party in honour of the visitors. After the Viceregal "Empfang," the entire party drove down to the Nelson Pillar, where they boarded special tramcars which conveyed them to Kingstown, where they re-embarked and set sail at nine o'clock for Jersey and the Channel Islands.

An Unusual Increase in the Birth-Rate.

So rarely has the Registrar-General to record an increase in any of his percentages that it must have been a real pleasure to him to issue his quarterly return on this occasion. Cupid has been busy, and there were 60,864 marriages in the first quarter of the present year. That compares with 44,661 in the like period last year, and is higher by some thousands than the figures in any first quarter for ten years past. We fancy we may take the sudden disposition to marriage as an additional testimony to the prosperity of the country, and we may look forward to the increasing number of marriages giving a fillip to the birth-rate in the future. There was a decided increase in births in the quarter under review, and with the death-rate still declining, it looks as if we were in for a brief period in which the pessimists about these matters will have less occasion for their gloom.

Enteritis from a Dust Heap.

At a meeting of the Southwark Board of Guardians on Friday last a report was read from Dr. H. W. Bruce, medical superintendent at the infirmary, stating there had been 18 cases of infective enteritis among young children patients in the institution, and that four had died. He attributed the outbreak entirely to the poisoning of the children by the refuse on the railway siding, which was being removed by the Camberwell Borough Council. The facts have been laid before the Local Government Board, and the guardians have decided to take immediate action in the case.

A King Edward VII. Memorial in Guiana.

To perpetuate the memory of the late King Edward, the colonists, with the co-operation of the Combined Court, have erected a model dispensary for the prevention and treatment of tuberculosis, in which, as is known the world over, His Majesty took a profound interest. Erected at a cost of close on $4,000, the dispensary was opened by his Excellency the Governor, Sir Walter Egerton, on July 22nd, in the presence of the most prominent citizens.

The idea of the memorial taking the form it does emanated from the Surgeon-General, the Hon. Dr. J. E. Godfrey, now on furlough in Scotland. The Governor paid a fitting tribute to Dr. Godfrey's interest and zeal, both with regard to his conception of the memorial and in arresting the death-rate for which tuberculosis is responsible in the

left the following direction in his will:—"I desire to be buried in the same grave with my late beloved wife. The inscription on the gravestone is to be, in addition to the names and dates, 'A Man of Hope and Forward-Looking Mind.'"

He left the following directions regarding his museums at Selby, his native place, Haslemere, and Chenies Street, London:—"I leave the three museums at Haslemere, Selby, and 22, Chenies Street, and their contents to my trustees upon trust to dispose of the same as they in their own absolute discretion shall think best, but my desire is that, without imposing any trust upon my said trustees, they shall dispose of my said museums and their contents in accordance with my wishes expressed to them during my life."

Accidental Death of an Army Medical Officer.

Major George Buchanan, Royal Army Medical Corps, who had been lying in the Hampstead General Hospital since Thursday as the result of the accidental discharge of a revolver, died on Saturday morning last. Deceased, who had not long returned from India, was showing the revolver to a friend at Harvard Court, West Hampstead, his residence, believing it to be unloaded, when a single live cartridge which had inadvertently been left in it exploded. The Major was wounded in the stomach, from which he succumbed two days later. At an inquest held yesterday, a verdict of accidental death was returned.

Anti-Typhoid Inoculation.

At a recent important discussion at the Royal Military College, Millbank, some important contributions to the subject were made, particularly in regard to the inoculation against typhoid of British soldiers in India. Colonel Sir William Leishman (Royal Army Medical Corps), Professor of Pathology, Royal Army Medical College, said that since he had the honour, in 1907, of acting as reporter on this subject at the International Congress of Hygiene at Berlin, anti-typhoid inoculation had come to occupy a very important place in military medicine. At that time it was very far from being generally accepted as a practical measure, although its protective value was recognised by most bacteriologists. Now, he thought, it might be said to be generally regarded as one of the most powerful weapons in the fight against typhoid fever. In the Army they had now accumulated a very considerable body of experience in the practical use of the vaccine. They were the first to adopt the method as a preventive measure on a large scale, and, although its general acceptance had been a slow process, and it still remained on a purely voluntary basis, it was now widely taken advantage of by the soldiers, and had few, if any, strong opponents in either the combatant or the medical branches of the Army.

The next Eugenics Congress.

At its first annual meeting, which was held in Paris, the Permanent International Eugenics Committee accepted the invitation of Dr. C. B. Davenport, of Cold Spring Harbour, Long Island, to hold the next International Eugenics Congress in the United States next year, probably in the month of September. The committee, after discussion, also agreed to he establishment of an International Engenics ibliography. Among those who attended the meeting ere Major Darwin, Mrs. Gotto, and Professor chuster (England), Professor Adams Woods (America, r. Mjoen (Norway), Dr. Plock (Germany), Professor ini (Italy), Dr. Soren Hansen and Mr. Vincent aeser (Denmark), and a number of eminent French genists, including Professor Frederic Houssay, rofessor Faure, and M. Lucien March, Directeur of e Statisque Générale de la France.

lingering by Insured Persons.

A special committee has been appointed to inquire o the allegations of excessive sickness claims malingering among insured persons. Sir Claud uster, the legal member of the English Insurance Commission, is chairman, and among the other members are Miss Mona Wilson, the lady member of the Commission, Miss Mary Macarthur, Secretary of the Women's Trade Union League, Mr. W. P. Wright, Grand Master of the Manchester Unity, Mr. A. H. Warren, President of the National Conference of Friendly Societies, Mr. Walter Davies, Sons of Temperance Society, the Chairman of the Manchester Insurance Committee, and three representatives of the medical profession.

The terms of reference are "to inquire into and report upon the alleged excessive claims upon and allowances by approved societies in England in respect of sickness benefit and any special circumstances which may cause any such claims or allowances." The investigation is limited to England. A full inquiry will be made into the allegations of malingering, particularly among women, and into the assertions that panel doctors have granted medical certificates to insured persons without proper examination and for trivial ailments.

Society of Apothecaries of London.

The following candidates, having passed the necessary examinations, have been awarded the L.S.A. Diploma of the Society, entitling them to practise medicine, surgery, and midwifery:—

T. H. Cresswell, P. R. Cross, H. G. Marshall, O. Marshall, and C. E. Reckitt.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

T. W. F. (Birmingham).—The rule is a standard one—"always verify your references." The reference to which our correspondent alludes is presumably incorrectly given, and we regret that we cannot help him.

DR. M. W. (Dublin).—We have forwarded the newspaper cutting to the author referred to.

M.D. ST. ANDREWS.—A novel based upon a purely psychological problem might appeal to a certain class of readers, and might even prove a success, but underlying it there would necessarily have to be a firm substratum of feminine charm, plot, counter-plot, and triumph of virtue—attributes of general interest upon which fictional literature is usually based.

RESPICE FINEM (Barnstaple).—In common with rheumatism, obesity and gout, arterio-sclerosis probably owes its origin to impaired nutrition, arising from metabolic perversion.

R. M. O.—Our correspondent is well advised to concede the demand. The matter, after all, is not one of much moment, while it tends to convenience of arrangement, without a sacrifice of personal interest.

"THE INSTITUTE OF FACIAL PERFECTION."

WE are informed that Dr. F. Koch, of Berlin, did not read his paper on "Disfigured Noses and Their Correction" at the International Congress of Medicine, owing to the alleged fact, which was pointed out by *Truth*, and commented upon by the MEDICAL PRESS AND CIRCULAR of August 6th, 1913, that this gentleman was associated with the above institute, stated to be carried on by a Mr. C. H. Willi. It is gratifying to note that the executive of the Congress have acted promptly in the matter, but, as *Truth* remarks in the issue of August 20th, 1913, the omission of the paper "must have been a cruel disappointment to the pioneer of facial surgery!"

B. W. C.—Too much acrimony appears to us to have been introduced into the argument, and a settlement between two partners becomes impossible when this is the case. The plan might be adopted of securing the services of a mutual friend to act as arbitrator and relieve the friction which has unfortunately arisen.

M.D., F.R.C.S.—The lactate and bromide of zinc have been used with success in epilepsy in place of the usual bromide of potassium salt.

INQUIRENS.—The gastro-intestinal disturbance present in children during the summer months may be due to acidity of the succus entericus, to inhibition of the intestinal enzymes, to intestinal toxæmia from the absorption of products of decomposition, and to imperfection of the digestive cells.

OMEGA.—Raw apples are undoubtedly difficult of digestion, and should, for this reason, be forbidden for children, at all times. The indigestibility of uncooked apples is recognised by all authorities.

BIOGRAPHER (Edinburgh).—Regret we are unable to assist your enquiries in the direction refered to, but so far as memory serves us, we think you will find the best account of Dr. Archibald Cameron and the fate that eventually overtook him, in Sir Walter Scott's novel, "Redgauntlet." There would appear to be little doubt that he became the scapegoat of a revengeful government, and was executed under the law of treason.

Appointments.

CALDWELL, J. S., M.B., B.S.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Beith District of the county of Ayr.

HOOD, THOMAS, M.R.C.S., L.R.C.P.Lond., has been appointed Principal Medical Officer in Southern Nigeria.

MANNING, FITZMAURICE, L.K.Q.C.P.Irel., Principal Medical Officer in Northern Nigeria.

ROBINSON, HARGREAVES, L.A.H.Dub., L.M.R.C.P.Irel., Clinical Assistant to St. Paul's Hospital for Skin and Genito-urinary Diseases.

SMITH, JOHN, M.D.Edin., M.R.C.S., L.R.C.P.Lond., Medical Referee under the Workmen's Compensation Act, 1906, for Fife and Kinross (Kirkcaldy District).

STEWART, J., Certifying Surgeon under the Factory and Workshop Acts for the Dufftown District of the county of Banff.

Vacancies.

Medical Officer wanted for Egypt. Salary £350 per annum, with extras. Apply, T. M., MEDICAL PRESS AND CIRCULAR, 29 Nassau Street, Dublin. (See advertisement.)

Monkstown Hospital, Co. Dublin.—Resident Medical Officer. Salary £40 and board. Immediate application to Hon. Secretary. (See advertisement.)

Hospital for Sick Children, London.—House Surgeon for six months. Honorarium £30, with board, residence, and washing. Forms of application of Secretary. (See advt.)

Oxford County Asylum, Littlemore, Assistant Medical Officer. Salary commencing at £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent.

Berkshire Education Committee.—Assistant School Medical Inspector. Salary of £300 and travelling expenses. Further particulars of W. C. F. Anderson, Education Secretary, Shire Hall, Reading.

Queen's University, Belfast.

Northampton County Asylum, Berrywood.—Junior Assistant Medical Officer. Salary commencing at £200, with board, lodging, and washing. Applications to Medical Superintendent.

Royal Sea Bathing Hospital for Surgical Tuberculosis, Margate.—Resident Surgeon. Salary £120 per annum, with board, residence, and laundry. Applications to the Secretary at the Offices, 13, Charing Cross, London, S.W.

London Fever Hospital, Liverpool Road, N.—Assistant Resident Medical Officer. Salary £150 per annum, with residence and board. Applications to the Secretary at the Hospital.

Certifying Factory Surgeon.—The Chief Inspector of Factories announces the following vacant appointment:—North Belfast (co. Antrim).

Births.

BIGGS.—On August 19th, at 10 Sudbrooke-road, Nightingale lane, S.W., the wife of George Nixon Biggs, M.B., B.S., of a son.

GOING.—On August 20th, at Erinagh, Littlehampton, Sussex, the wife of R. M. Going, F.R.C.S., of a son.

ILOTT.—On August 22nd, at Hamlegro, Bromley, Kent, the wife of Dr. Cyril H. Ilott, of a daughter

RODGERS.—On August 21st, at Hollins Lane, Winwick, Warrington to Dr. and Mrs. Fred Rodgers—a son.

SCOTT.—On August 19th, at Market Harborough, to Dr. and Mrs. C. T. Scott—a son.

Marriages.

BARKER—MORLEY.—On August 19th, at St. Botolph's, Cambridge, Lieutenant-Colonel Frederick Rowland Barker, M.B., R.A.M.C. (retired), of "Lyncourt," Chaucer Road, Worthing, and formerly of "The Mount," Aldershot, to Esther Clare, eldest daughter of Felix W. Morley, M.A., Mus.Bac., of 2 Harvey Road, Cambridge.

CATHCART—BOSTOCK.—On August 21st, at St. Chad's, Stafford, Edward Provan Cathcart, M.D., D.Sc., to Gertrude Dorman Bostock, M.B., B.Sc., second daughter of Henry Bostock, Esq., of The Oaklands, Stafford.

Deaths.

BUCHANAN.—On August 22nd, at Hampstead, the result of a gun accident, Major George Johnstone Buchanan, R.A.M.C.

FINCH.—On August 22nd, at a nursing home in London, Margaret, the wife of Herbert J. Finch, M.R.C.S. of Purton, Wilts.

MILLER.—On August 15th, at his residence, Finchley, London, N., Frederick M. Miller, M.R.C.S., L.R.C.P., aged 65 years.

NUNNELEY.—On August 21st, at 29 Royal Crescent, Bath, John Albert Nunneley, M.B., eldest son of the late Thomas Nunneley, F.R.C.S., of Leeds, and for 30 years Ophthalmic Surgeon at the Leeds Infirmary.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, SEPTEMBER 3, 1913. NO. 10.

NOTES AND COMMENTS.

The Prenatal Restaurant. THE announcement that a special restaurant for mothers-to-be has just been opened in New York will be welcomed by eugenists and the public alike. With the laudable object of keeping expectant mothers of the working classes in prime health by providing them with cheap and nourishing food, such a scheme should prove of the greatest value, and for its inception Miss A. Mabel Parker, of New York, may be highly commended. Both in France and Germany there exists State machinery for this purpose, and in Great Britain there are several private agencies at work with the same end in view. In the neighbourhood of London there is the Croydon Dining Room for Mothers, inaugurated under the auspices of the Women's League of Service "with the definite object of helping motherhood during the difficult time before and after confinement, and by properly feeding a woman beforehand, to enable her to bear a strong and healthy child." For the sum of twopence halfpenny a substantial midday meal of broth, meat and vegetables can be obtained. We understand that a similar "dining centre" is held at Hammersmith. It is well known that the character of the food taken by a pregnant woman reacts more or less directly upon the health and vitality of her offspring. A little wholesome instruction, simply imparted, either by popular lectures or the distribution of leaflets, would add to the undoubted utility of this beneficent enterprise.

Hysteria or Meningitis. THE occurrence of convulsions in infancy is such a frequent thing that unless often repeated or of exhausting severity, their significance is seldom likely to be over-estimated. Not so in the adult. The sudden onset of fits in a person of thirty years of age, previously healthy, would be sufficient in itself to arouse the greatest suspicion of intra-cranial disease. It is true that convulsions may sometimes occur in the course of some functional nervous malady, as in hysteria, or they may be symptomatic of certain forms of mental disorder. The medical attendant may be placed in an extremely awkward position if he fail to recognise the serious import of any symptom of disease, especially if the latter be a fatal one, and it is not always easy to say definitely whether any case with pronounced nervous manifestations be functional or organic. An unfortunate instance of this difficulty arose the other day at Leatherhead, where a medical practitioner, who was called to attend a working man suffering from convulsions, attributed the patient's condition to incipient mental unsoundness. The man died a few days afterwards, and the autopsy, made by two independent medical men, revealed recent meningitis, death being due to cardiac failure consequent upon the convulsions. Even if the true state of affairs had been correctly diagnosed during life, a fatal termination would, doubtless, still have been inevitable, but the consequence of the failure to appreciate the real gravity of the case comes as a grim warning to every practitioner in charge of cases of so-called functional nervous or mental disease.

French Drains. THE practical genius of the Anglo-Saxon could hardly be better illustrated than in his general sanitation. Although a great deal has been done by way of purifying rivers, abolishing slum areas, improving industrial conditions, and, in a word, housing all sorts and conditions of men in a scientifically good environment, much yet remains to be achieved in the United Kingdom. A holiday trip to the Continent should teach the English sanitarian a lesson of thankfulness that the good seed of the sanitary gospel has grown and flourished like a green fig-tree in his own land. Even in so advanced a country as France the contrast is striking. On a recent tour in the smaller towns and villages in the south of France, the writer was struck by the gross sanitary defects that were common. For instance, in one hotel in a small but fashionable spa there were three upper floors each having some sixty bedrooms. There was one closet on the staircase for each floor. Those on the two lower were of a modern flush-out type and were well supplied with water. The cistern on the top floor was defective. By manipulating the flushing apparatus it was sometimes possible to set it in action. As a rule, however, one was compelled to use a substitute in the shape of a pitcher of water, that is to say, when it happened to be full. Baths were absent in this hotel. In another hotel in the largest and finest spa in the district there was one old-fashioned pan closet, with weak and altogether inefficient water supply, situated at the bottom of a small well running up the middle of the building, covered in at the roof, and forming the outlet of a number of windows.

Malodorous France. THE sewage in our own country—in spite of the Pollution of Rivers Acts—is often turned into inland waters. It is not open to the British sanitarian, therefore, to throw stones at his Continental neighbours in this respect. In France, however, it appears to be the rule rather than the exception to discharge drains, wherever possible, into the nearest stream, or rivulet, pond, lake, or river. The beautiful Seine together with its tributaries is thus polluted at all parts of its course. Nor does the mischief end there. In many places crude sewage runs out of houses into the gutters of the streets, and the air of some of the most picturesque hamlets in France is heavy with malodorous vapours which rival the famous "forty stinks" of Cologne in their variety and pungency. Indeed, the ominous smell of sewage gas—unmistakable to the trained sanitarian—is practically universal in France wherever there are human habitations in mass or detail. Much of the evil might be done away with by a more stringent system of inspection and by the enforcement of existing laws. It seems unthinkable that so progressive a nation should permit its dwelling houses—let alone its hotels—to be provided with bad drains and defective, inefficient sanitary appliances. An inherent love of order and beauty is everywhere apparent, but it lacks the practical sanitary guidance which alone can place the health of a nation on a sound footing.

A Poetess on Surgery. The distinguished authoress of *Poems of Pleasure and Passion* has, in the current number of *Nash's Magazine*, thought fit to wage a violent paper warfare upon what she describes as "surgical hysteria," or "hysterical surgery," which she believes minimises the usefulness of both man and woman who choose to submit to "unnecessary operations" more than any other "combination of causes in any era of the world." Miss Ella Wheeler Wilcox certainly does give credit to orthopædic surgery, and even acknowledges that surgery can perform miracles of good, and that it is a blessing to the human race. It is when she discourses on the pelvic organs that her poetic licence knows no bounds, for she goes on to describe, in what seems dangerously near to hysterical prose, the evils resulting from people permitting themselves to be "hacked, unsexed, and deprived of natural organs when they might keep them." The grounds upon which she believes that women are "needlessly rendered barren," and the "appendix needlessly removed by surgeons" appear to rest upon no securer foundation than the personal knowledge of a few unsuccessful cases. Miss Wilcox is, of course, entitled to her opinions, but to say that physicians and surgeons "cause death or life-long invalidism for men and women by the score through unnecessary operations" is not only inconsistent, but it exceeds the limits even of poetic criticism. To hoist the authoress with her own petard, it is generally wise to "distrust that man (or woman) who tells you to distrust."

An Optician "Doctor." In our news column will be found the report of an inquest held at Croydon upon an infant of eight months, who died from sickness and diarrhœa, and who had been "treated" by a "Dr." Sparling, of Northcote Road. This gentleman, in his evidence, stated that he was an optician, and not a registered medical practitioner. He acknowledged having given medical advice and a prescription to the father of the child, who paid him 2s., believing him to be a qualified medical man. The child died the next day, and a registered medical practitioner was called with whom "Dr." Sparling was alleged to have formerly been in partnership. The evidence of the qualified practitioner was to the effect that Mr. Sparling had acted as his surgery attendant, seeing several patients and dispensing under supervision. In other words, it was the old story of the unqualified assistant over again. As the Coroner rightly remarked, Mr. Sparling had "brought himself within the clutches of the law by calling himself a doctor." No doubt the attention of the General Medical Council will be called to this case, which seems to be a plain instance of unqualified and unregistered practice. A further point of medico-legal interest is referred to by an esteemed correspondent, whose letter we publish elsewhere—namely, that no attempt appears to have been made to determine the actual cause of death by a *post-mortem* examination, the jury having been allowed to return the verdict of "Death from natural causes." In such cases the inquiry cannot be said to be complete, though it may be satisfying to the parties concerned.

LEADING ARTICLES.

ANAPHYLAXIS.

As a progressive science medicine presents an apparently inexhaustible field for research. Discoveries of far-reaching importance have been made in various directions within the past few years with such rapidity that it is difficult for the hard-working practitioner to keep abreast with the more practical advances in diagnosis and treatment. Fortunately, the modern tendency towards specialising, both in research and in practice, has relieved the pressure upon the private practitioner. At the same time, there are certain advances about which it is both desirable and necessary that he should be informed in order that he may do justice to himself and to his patients. A subject of that kind is anaphylaxis, the important discovery first described by Richet in February, 1902. The basis of this curious reaction was set forth in the statement that a substance which neither killed nor sickened a normal animal gave rise to intense and fatal effects in an animal which some time previously had been given a dose of the same substance. Anaphylaxis, in fact, is the opposite condition to protection (phylaxis). The discovery was due to some experiments into the toxic properties of certain marine animals. While endeavouring to determine the toxic dose it was found that when the animals had apparently recovered from a first injection after an interval of a few days a much smaller dose was rapidly fatal. English readers may now obtain authoritative information upon the whole subject from a translation of Professor Richet's work by Dr. J. Murray Bligh, Medical Registrar of the Liverpool Royal Infirmary (*a*). This systematic treatise is full of matter of fascinating interest. It shows, for instance, how previous investigators have been faced with the phenomena of anaphylaxis, the significance of which had escaped their vigilance. Behring, in 1893, found that guinea-pigs injected with antidiphtheritic toxin became in certain instances more intensely sensitive to that substance, but he did not consider the phenomenon either general among the injected animals nor common to all persons. Studying immunity particularly, he considered super-

---

(*a*) "Anaphylaxis." The University Press, London, Constable and Co., Ltd. 1913.

sensitivity a paradoxical reaction. Knois and Kitasato, working under his direction, showed that in some instances guinea-pigs died after doses 700 or 800 times weaker than the fatal dose. It remained, however, for Richet to state the general principles. The antigen that produces anaphylaxis is fairly definite. "Possibly some day," says Richet, "it will be found that a mild anaphylaxis follows the injection of crystalloids; but up to the present everything seems to prove that colloids alone are able to induce it; just as colloids alone are capable of producing the reaction of immunity." Crystalloids do not induce anaphylaxis, but colloids, almost without exception, are capable of inducing it. It is interesting to note, however, that although definitely crystallisable substances do not produce the reaction, yet certain drugs like quinine, antipyrin and iodoform are apparent exceptions, and in some predisposed persons inevitably lead to urticaria and anaphylactic sickness. The symptoms of anaphylaxis vary somewhat in various animals —a mild case being shown by pruritus, urticaria, local œdema, dyspnœa, fæcal and blood-stained bowel discharges, tachycardia and various nervous symptoms. The animal may recover suddenly after twenty to forty minutes or it may die in five or six hours. Or having recovered from anaphylactic shock it may die four or five days later of chronic anaphylaxis. In acute cases the onset is sudden, developing in one minute, sometimes in half that time, sometimes even during the second injection. The action appears to be due to what Richet calls an apotoxin acting upon the central nervous system. A period of incubation is required and a secondary dose administered before the lapse of the necessary interval has no effect. The first injection is described as preparatory; a certain time is required for the development of the toxic substance in the system, while the second proves the exciting injection. The tuberculin reaction is anaphylactic. The preparatory stage takes place in the tuberculous tissues, while the injected tuberculin excites a mild anaphylaxis. Many points raised in Richet's work are of great suggestive value. The minuteness of the preparatory dose was shown by Rosenau and Anderson to be even as small as 0.000,001 cc. of serum. Man is extremely sensitive to the anaphylactic reaction, and intravenous second injections invariably constitute an actual danger. There is a form of alimentary anaphylaxis, as, for instance, the acquired sensitiveness to horse serum shown by certain animals fed on horse-flesh. There can be little doubt that in Richet's brilliant discovery of anaphylaxis, medicine has added greatly to its resources. It is, of course, impossible to do more than outline the subject briefly within the limits of an article like the present, which is merely intended to draw the attention of busy practitioners to an important practical factor in their daily work. In a preface to Dr. Bligh's excellent translation, Dr. T. R. Bradshaw writes the following illuminating passage:—"During the past quarter of a century, however, the labours of the cytologist, the bacteriologist, and the biochemist have thrown a flood of light on the intimate processes of life, and the physician has not been slow to endeavour to turn to practical account the suggestions they have offered for his guidance."

CURRENT TOPICS.

Holiday Resorts and Insanitary Conditions.

At this time of year one sees platitudes appearing in the press about the benefits and delights of leaving the dust of cities and seeking the pure air of the country. Granting that in many ways the air of the country and seaside is purer than that of cities, and especially manufacturing cities, it is not so in respect of dust, except in isolated situations on solitary moorlands, where roads do not run and traffic is light. The country town or seaside holiday resort is far dirtier and dustier than the city, for the simple reason that it is not so well drained and watered. In the present day, with motors passing everywhere, disintegrating the road surface, and raising clouds of dust, even in the village with its single street, this nuisance is destructive of clothes and comfort; but in the seaside or country town, with its converging roads, dust is a serious menace to health. If the dust, swept up from the surface of the street by every gust of wind, or raised by each rushing motor in a suffocating, blinding fog, were composed of minute disintegrated particles of mineral matter only, the inhalation of it would be injurious to the lungs and provocative of inflammatory attacks of these mucous membranes, but, to a very large extent, dust being composed of human and animal excrement, of powdered offal, of fish, flesh and fowl, of human expectoration and bacilli of all sorts, it is evident that deposited on our food, or passing in quantities into our lungs, it must be a fruitful cause, an extensive propagator, of tuberculosis, pneumonia and other infectious diseases. Yet little or nothing is done by the sanitary authorities to abate this nuisance.

The Detection of Impurities in Food and Drink.

Some interesting information is contained in the report of the Government Chemist upon the work of the Government laboratory for the year ending March 31st, 1913, which was issued last week. With regard to so-called "temperance" drinks it may be noted that beverages of a non-alcoholic character are frequently sold as "cider" or under such names as "sparkling cider" and "champagne cider," with the added words "non-alcoholic" or "non-excisable," being, the Government Chemist says, mixtures of real cider with solutions of sugar and contain less than 2 per cent. of proof spirit. "But," he adds, "many non-alcoholic ciders, so called, are entirely free from fermented apple juice and are simply solutions of sugar which have been aerated, flavoured and coloured. . . . Six samples purchased as cider were found to be artificially prepared liquids." The percentage of alcohol present was determined in 356 samples of herb beers, beer substitutes, and temperance beverages. In 268 cases the alcohol did not exceed the legal limit of 2 per cent. of proof spirit, 63 samples contained between 2 and 3 per cent., 15 between 3 and 5 per cent., while ten samples described as ginger beer or herb beer contained proof spirit varying in amount from 5.7 per cent. to 11.5 per cent. So far as beer is concerned the 2,398 samples taken at retailers' premises showed practically the same percentage of dilution as the previous year. "Liqueur chocolates" are, apparently, not so innocent a sweetmeat as their name might imply. Of 23 samples tested six contained proof spirit ranging from 5 to 8 per cent., and in two cases the amounts were 23 and 27.4 per cent. In order to ensure that only genuine tea shall come into the country all consignments are examined at the port of entry, and doubtful samples are sent to the Government laboratory. Of the total number of samples submitted, 982, representing 73,355 pounds, were condemned as containing sand or other foreign matter and 15,491 lbs. additional were reported as unfit for human consumption. It is stated that there was, however, no evidence in any case of intentional adulteration and also that the quantity rejected, though large, is quite insignificant in relation to the total amount of tea imported, namely 359,000,000 lbs., an increase of 12,000,000 lbs. on the total of the previous year. The report also contains interesting information as to the use of preservatives in food products. Three years ago, boric acid, salicylic acid, and hydrogen peroxide were found together in several samples of cream and butter. This year no preservative other than boric acid was found in the samples tested. The total number of samples examined in the course of the year was 209,502, an increase of 14,332 on those of 1912. Such activity is ample proof of the care that is taken to ensure the purity of the food and drink that reach the consumers' table.

Effects of Exposure to the Sun's Rays.

Everyone is coming home from his holidays now. His friends greet him: "How brown you look!" implying that a convalescent dermatitis is an unfailing sign of exuberant health. It is a queer superstition. The actinic rays of the sun are rather harmful than otherwise, yet we all congratulate the man deeply, beautifully brown, as though there could not possibly be anything wrong with him, forgetting that many of the most sunburnt people we meet are sanatorium patients and that a bronzed skin and diseased adrenals have a distinct connection. Excessive exposure to the sun, from pseudæsthetic motives, does no real good. Besides its necrotic action on the skin, malaise, headache and a general upsetting of nervous control are not infrequently the total gain of the would-be fashionable no-hatters. Sunburn is a defensive effort of nature to interpose an opaque shield between the sun and the human organism. The burnt generations of the tropics have made this effort a hereditary trait, so that now the skins of the fathers are visited upon the children from the time of their birth. If an indiscriminate brunesence is a thing desirable and to be obtained at any cost, cosmetic colouring is better than chemical, and is much more convenient in a climate where at the shortest notice we may have to take a benighted walk under the midday sun.

School Medical Service.

Two explanatory circulars were issued last week by the Board of Education in connection with the new regulations with regard to grants for school medical service, prescribing the conditions under which they will be allotted. In cases where the Board is satisfied that medical inspection and treatment is satisfactory it will hand over to the authority one-half of the expense incurred. Where it is not satisfied it may reduce the grant or withhold it altogether. It is very gratifying that this step, which will be both a relief and a stimulus to the education authorities, has not been delayed. For the purpose of assessing grants in respect of the work of the school medical service, which is ancillary to, or associated with, medical treatment, the Board will be prepared to take into account ameliorative undertakings falling under any of the following heads, if carried out by the school medical officer or his staff, or under his direction or supervision: (a) The re-examination, after a suitable interval, of children found to be defective at the routine inspection. (b) The further examination at inspection clinics or elsewhere of children found to be defective at the routine inspection. (c) The examination at inspection clinics or elsewhere of "special" cases referred by school attendance officers, care committees, teachers, parents and others. (d) The "following up" of cases of defect by school nurses or health visitors by means of visits to the schools or the homes of the children. (e) The following up and after-care of cases of defect by children's care committees and other agencies working in co-operation with the school medical officer. Similarly, for the purpose of assessing grants in respect of medical treatment proper, the Board will take into account treatment falling under any of the following heads: (i) The treatment of minor ailments carried out by school nurses. (ii) The provision of spectacles, surgical or other appliances. (iii) Arrangements for medical or surgical treatment at hospitals, infirmaries, dispensaries, etc., or by private practitioners. (iv) Treatment at school clinics. The expenditure of money in this direction will be amply repaid by the increased physical welfare of the scholars.

"The Paths of Glory."

England is panicking about her athletes. She taught the world to play games, and now that she is no longer pre-eminent at every one, she prates about degeneration. The last Olympic meeting did it. America beat her. Now we have an influential committee sitting ponderously on the subject. America must be beaten at the high jump or the Empire is a thing of the past. American methods are decried and arrangements made to put them into practice immediately. The interesting thing is that America, who has lifted all the cups, and has even been honoured by a cartoon in *Punch* for so doing, is beginning to see that her cinder tracks are not paths of racial righteousness. To take an example, the Naval Academy at Annapolis has definitely barred contests involving extremes of strength expenditure. The four-mile rowing race is to be reduced to between one and two miles, and the quarter will be the longest track race allowed. These decisions are not the result of mere theorising, but because more deaths and enforced retirements through physical disability were found among officers who had been athletes than among the leaders of a simpler life. It is fairly obvious that an over-developed young man with a hypertrophied heart has less chance of long and healthy life than one of average symmetrical musculature. It is the story of the hare and the tortoise over again. The craving for results at all costs, with its postulated specialism, is the root of the matter. If we would go on as we were, instead of trying to adopt ephemeral American methods, whose authors are rapidly discarding them, it were better for us. We might adopt the sound paradox that the loss of athletic contests is a sign of progress, and that to win them points to degeneration.

The Use of Proprietary Medicines.

It is reported that the National Health Insurance Commission, Scotland, having been consulted as to whether proprietary medicines can property be prescribed by panel doctors and dispensed by panel chemists, have issued a circular stating that they are advised that, for the purpose of an Insurance Committee in the administration of medical benefit "Proprietary Medicines" are to be regarded as falling under two groups: (a) "Proprietary medicines" the composition of which is not publicly disclosed, but is alleged to be known only to the proprietors or manufacturers of the medicines. This group includes what are commonly known as "patent medicines" or "secret remedies." (b) "Proprietary medicines" the composition of which is published without reserve, though the preparation may be made up in a particular form, or called by a special name. The

Commissioners consider that in general it may be taken that preparations included in group (a) should not be prescribed for, or supplied to, insured persons. The Commissioners, on the other hand, consider that preparations included under group (b) should be supplied by chemists where ordered for insured persons or insurance service practitioners. The Commissioners assume, however, that practitioners will not order "Proprietary Medicines" under group (b) unless they look upon them as possessing recognised advantages over pharmacopœial or other well-known non-proprietary preparations of similar composition, and that they will, in prescribing, bear in mind that certain drugs which have special proprietary names figure also under other titles in the British Pharmaceutical Codex. These recommendations are entirely in accordance with the ethics of the medical profession, and such a pronouncement in respect of patent medicines is of value as constituting a definite official condemnation of the group of medicines known as "secret remedies." If the latter "should not be prescribed for, nor supplied to, insured persons," it may be assumed that their use should be equally prohibited for all sections of the community.

Compensation for Industrial Diseases.

The report of the Home Office Departmental Committee appointed to consider whether Cowpox, Dupuytren's Contraction, Clonic Spasm of the Eyelids, apart from Nystagmus and Writers' Cramp, can properly be added to the diseases enumerated in the third schedule of the Workmen's Compensation Act, 1906, has been recently issued as a Parliamentary White Paper [Cd. 6956]. The Committee consisted of Mr. Ellis Griffith, M.P. (chairman), Sir Thomas Clifford Allbutt, Judge Ruegg, and Dr. T. M. Legge. In their summary of recommendations the Committee express the opinion that (1) Cowpox and Dupuytren's Contraction should not be scheduled; (2) The word '"Nystagmus" added to the first column of the Schedule by the Order of May 22nd, 1907, should be replaced by the words "Miners' Nystagmus in miners or others (a disease most common among miners, of which oscillation of the eyeballs is the commonest but not invariably present objective sign)." The word "mining" should be retained in the second column; (3) The words "Writers' Cramp" should be added to the first column of the Schedule, the second column being left blank, and compensation for a single disablement should be payable in respect of not more than 12 months' incapacity in all. The Committee record their indebtedness to their secretary, Mr. Arthur Locke, of the Home Office, for the ability and courtesy with which he has discharged his duties.

Sir Jonathan Hutchinson's Museums.

It is one thing to found a hospital or a museum and another to provide adequately for its maintenance. According to the *Times*, the future of the educational museums, founded and equipped by the late Sir Jonathan Hutchinson, at Haslemere, Selby (Yorks), and 22, Chenies Street, London, is causing some concern to those whose privilege it has been to use them. In his will, the details of which have been recently published, Sir Jonathan leaves the museums to his trustees to dispose of as they may think best, expressing the desire that in such disposal they shall give effect to his known wishes—as expressed to them during his lifetime. There is, however, no other provision in the will for the future of the museums. In his lifetime Sir Jonathan spent on the museums and their equipment at least £30,000, and the Haslemere institution is insured for £10,000. At Haslemere there is a strong feeling that everything should be done to retain the museum for the town, and it is understood that the family are willing to hand it over to a responsible committee or body of trustees so that the museum may be placed on a permanent and public basis. The annual cost of maintenance on present lines is about £400, and an appeal will shortly be issued with the hope of securing this sum for five years at least, for it is recognised at Haslemere that if the forthcoming appeal is not adequately responded to the usefulness of the museum will either be restricted or the town will lose the institution altogether. The effort which is to be made to secure the museum for the town will have the support of the public men of the Haslemere district, and it is understood that members of the Hutchinson family are ready to co-operate. It was the hope of Sir Jonathan Hutchinson that when he died others would come forward to support the institution and continue the work he had begun. It is earnestly to be hoped that a speedy and adequate response will be made to the appeal, so that these wonderful collections of scientific treasures may be preserved as lasting memorials of their illustrious founder.

PERSONAL.

Major C. C. Cumming, R.A.M.C., has been appointed Clinical Pathologist at Malta.

Mr. W. R. Dunstan, M.B.Lond., D.P.H., has been appointed a School Medical Inspector under the Kent Education Committee.

Dr. Charles Macmaster has been appointed to succeed Dr. Dugald Revie as Medical Officer of Health for the Borough of Rattray.

Dr. Thos. Henry Peyton, M.A., M.D., D.P.H., T.C.D., has been appointed Chief Tuberculosis Officer to the County Coucil of Cheshire.

The staff of the Aberdeen Health Department have presented Professor Matthew Hay with a framed collection of their photographs, in commemoration of his completion of 25 years' service as Medical Officer of Health for that city.

Dr. Louis Sambon, who, it will be remembered, has twice been sent to Italy by the Pellagra Investigation Committee, has now left England on a third field exexpedition under the same committee's auspices, in order to study the disease in America and the West Indies.

Professor Francis Gotch, F.R.S., Waynflete Professor of Physiology at Oxford and formerly Holt Professor of Physiology at Liverpool, left estate of the gross value of £19,928, of which the net personalty has been sworn at £18,621. One of the executors is Sir Victor Horsley.

Dr. N. E. Roberts, Visiting Physician to the City Hospital, Parkhill, Liverpool, having resigned that office, the Port Sanitary and Hospitals Committee, in accepting the resignation, have placed upon record their high appreciation of the valuable services rendered by him during the long period of twenty years.

Dr. R. F. Vere Hodge, M.B.Cantab., has been elected to succeed the late Dr. W. G. Groves as Medical Officer of Health for the Woodford Urban District. Before making the appointment the council placed on record their deep regret at the death of the able and trusted adviser who had resided amongst them for upwards of 50 years.

CLINICAL LECTURE

ON

RADIUM IN THE TREATMENT OF MALIGNANT DISEASE. (*a*)

By ROBERT KNOX, M.D.,

Director, Electrical and Radio-Therapeutic Department, Cancer Hospital; Honorary Radiographer, King's College Hospital.

The use of radium in the treatment of malignant disease is one which possesses great interest for us all, because when first discovered great hopes were held out that at last we had a remedy which would really do something to help us in the treatment of these conditions. It was even hoped that we had a specific cure for cancer.

I shall endeavour to show you what can be done with radium in the treatment of cancer, and for convenience of description have divided my lecture into the following heads:—

(1) Physical properties of radium.
(2) Methods of application.
(3) Action of radium upon cancer cells.
(4) Method of ascertaining the extent of the disease.
(5) Selection of cases for radium treatment.
(6) Types of cases which have received benefit.
(7) Factors which are likely to influence the result of treatment.
(8) Improvements which are likely to lead to improvements in results.
(9) Practical conclusions.

The element radium was discovered in 1896 by Madame Curie in the form of a salt—radium bromide. It has since been separated in the pure state. It is a metal of the alkaline group, and is very similar to barium. It possesses chemical, physical, and biological properties.

The chemical properties do not directly concern us in our consideration of the therapeutics, but it is well to consider briefly the physical properties before we pass on to the biological effects upon tissues, as a familiarity with these characteristics is of great service to us when we have to deal with its therapeutic action.

Radium has the property of separating the particles of air into elements called "ions," which it charges with electricity. If radium is brought into proximity with a charged electroscope, it will be seen that the gold leaf quickly falls. This property of radium has been made use of in a method of measuring its activity.

The radiations from radium are very intense; a screen of zinc sulphide brought near to a small quantity of radium is lighted up brightly in a dark room, while brilliant fluorescence is produced on a screen of barium platino cyanide; and a photographic plate is quickly affected by it.

The emanations from radium are analogous to those of uranium, and consist of three types of rays:—

Alpha, easily absorbed.
Beta, penetrating.
Gamma, very penetrating.

The alpha rays are readily stopped by a thin sheet of paper.

The beta rays are sometimes described as soft and hard; the latter are capable of passing through several millimetres of lead.

The gamma rays are very penetrating, requiring several centimetres to stop their passage.

The proportion of these rays given off from a quantity of radium is relatively:—

Alpha.	Beta.	Gamma.
80	9	1

The action of radium on human tissues was accidentally discovered by Bécquerel in 1901. He carried a quantity of unprotected radium in one of his pockets for a time. A fortnight later a burn appeared on the skin.

The accidental discovery of the activity of radium quickly led to a number of experimental exposures, first on animals and later on human subjects, and the development of radium therapy was a natural sequence.

Wickham of Paris experimented largely with the new agent, and there is no doubt that the medical profession is greatly indebted to this pioneer in radium therapy, both for the valuable work he has carried out himself, and for having stimulated others to work on the subject.

Remarkable success followed the use of radium on superficial tissues of the skin, nævi, keloid, lupus, rodent ulcer, and later epithelioma, have yielded to its curative power.

Methods of Application.

(*a*) *Emanation.*—By (1) Inhalation alone or mixed with oxygen; (2) injection; (3) deposition of the active emanation upon metals, in glass tubes, on agar pads.

The first method, *i.e.*, inhalation, has had up to the present no practical value in the treatment of malignant disease.

By injection, the emanation may be injected into tissues in a saline solution. The solution takes up a very small percentage of the active gas, and is therefore hardly applicable for the type of case we are usually called upon to treat.

By the deposition of the active principles upon metals, etc., this opens up a large field of usefulness, and it is possible that in the future we may be able to make good use of this method in selected cases.

Experiments are being carried on by Mr. Phillips, the Honorary Physicist to the Hospital, on the absorption power of petroleum, and we hope to get a fairly large percentage of the emanation taken up by petroleum, giving us a very active preparation which may be useful, both for internal administration and for injection into the tissues; by the former method it is hoped that we will be able to introduce into the system a large quantity of radio-active matter, and, while hardly hoping to influence cancer and similar disease by such a method of use, we may look for results in diseases of the respiratory system. Dr. Bellingham Smith has shown that radium emanation in whatever form it is used is rapidly eliminated by the respiratory organs; so that a future field of usefulness for radium may lie in the treatment of respiratory diseases, phthisis, asthma, chronic bronchitis, etc.

(*b*) *External Applications.*—(1) Deposit of emanation upon flat surfaces—pads of agar agar. Application to the surface of a growth and ionisation of the particles into the deeper structures by the aid of a galvanic current. This should prove to be a useful method.

(2) Flat applicators containing the radium in a varnish. Useful in the treatment of rodent ulcer, superficial epithelioma, recurrent nodules of cancer, etc. It is chiefly the beta rays which are employed by this method. The percentage of radium in these applicators varies according to the purpose for which they are used.

(3) Radium contained in metal tubes which act as filters, and can be of the necessary thickness for particular purposes; several tubes may be arranged around a growth.

(*a*) A Post-Graduate Lecture delivered at the Cancer Hospital, Fulham, S.W.

(4) Tubes may be inserted into the various cavities of the body, such as the mouth, œsophagus, etc.

In treating a stricture of the œsophagus, a preliminary X-ray examination is necessary to locate the stricture, and to give some idea of the extent of the malignant growth. A bismuth cachet is swallowed by the patient, and when screened, may be seen passing down the œsophagus. Should there be obstruction the cachet will be found in the stricture. The exact situation of the obstruction can be determined before the radium tube is passed into it. Later, a radiograph will help us to ascertain if the tube occupies the correct position necessary to influence the growth.

(5) Radium tubes may be buried in the substance of a tumour, and left in situ for the time determined beforehand. It is important to have the tubes well surrounded by the growth in order to get the maximum effect of the radiations upon the new growth; the tubes should be placed at equal distances from one another to ensure an equal distribution of the radiations.

Action of Radium upon Tumour Cells.

The action is not purely a caustic one, though caustic effects can readily be produced if the exposure is too prolonged, or the filtration is not sufficient. In some growths we deliberately make use of the caustic action to produce necrosis of the mass in the hope that when the slough separates, the normal tissues will fill in the resulting ulcer.

Occasionally it may be observed that enlarged glands are reduced in size with hardly any skin reaction; even after repeated exposures to the same area of skin, nothing more than a slight erythema is produced, yet the enlarged glands situated at a much deeper level slowly diminish in size.

Malignant indurated ulcers will rapidly break down and heal under the action of radium.

The degree of action induced is dependent upon the method of application. The various degrees of tissue change depend upon the filtration employed and the length of the exposure. Thus—if necrosis of the growth is necessary, a thin filter would be used and a long exposure given. Here we are making use of the beta rays and gamma rays, but the percentage of the beta ray is so much greater than the gamma ray that for practical purposes we may assume that the action produced is largely due to the beta ray, that is provided the exposure is not unduly prolonged. Should it be necessary to act on a deeper structure and at the same time protect the skin from such action, a thick filter of platinum or lead is used. Here the beta rays are almost entirely cut out, and the action is due to the gamma rays.

Two millimetres of platinum or four of lead are sufficient to cut off all but the hardest of the beta rays, while the gamma ray is unaltered. The filters containing the radium are enclosed in a rubber tube to prevent the secondary radiation induced in the platinum by the radium rays damaging the superficial structures. If the exposure is to be a long one, further protection can be secured by using an inch or more of lint or gamgee tissue.

In this way we can control the exposure so that we get nearly the pure gamma ray effect. This enables us to get an action upon the deep-seated parts.

It has been claimed that radium possesses a "selective action" on cancer cells. While admitting that it undoubtedly appears to act on such cells, it must be stated that the word "selective" is badly used in this sense. Radium possesses an action on all living cells in a varying degree, according to the resistance of the particular cell in question. Thus, young actively growing cells are more readily influenced than matured ones. The cells of a new growth approximate in structure and power of resistance to the actively growing cells of a tissue. In this way it is conceivable that the cancer cell is influenced should it at the time of exposure be attacked comparatively early in its life cycle. Should the cancer cells be of a stronger or more vigorous type, it is conceivable that the action of the radium may be a stimulating one and instead of a decrease in vigour of a particular cell, we may find an increase in activity, and a consequent increase in the size of a tumour. It is a fact that some cases of cancer increase in size at a quicker rate after radium has been applied. Some types of cancer are more amenable to radium treatment than others.

In addition to the action upon the cancer cell itself, radium acts upon all the tissues composing the growth and surrounding tissues. There is a general stimulation of the healthy tissues as a result of a radium treatment, so long as the exposure is not excessive. If it should be excessive, the action is apt to produce a caustic and ulcerative effect which leads to a local death of the tumour and a portion of the tissues around it. This may sometimes be desirable.

When the effect upon the healthy tissues is confined to a stimulation, we expect to find an increase of fibrous tissue formation which shuts off the cancer tissue from its blood supply and causes the atrophy of such cells. The reparative power of the normal tissues is strengthened, enabling them to cope with the invading cells and lead to their destruction.

These changes can be seen in sections removed from cases undergoing treatment.

The changes induced in malignant growths by the action of radium and similar agents are, so far as we can see, indistinguishable from the degenerative changes seen in cases of growth which have received no treatment; but this important point must be insisted upon; that the percentage of cases in which we see these changes is much larger in the group of cases treated by radiations than in the group which has received no treatment.

It must be admitted that occasionally we see a case of untreated cancer diminish in size, and, in a very small percentage, ultimately disappear. During the treatment of cancer by radiations, it is by no means uncommon in a fairly large percentage of our cases to see a marked diminution in size produced. In a smaller percentage we do see the growth disappear—at all events for a time.

The local disappearance of a growth is not a cure. The disease may have, and, in the majority of cases, undoubtedly has, extended to other parts of the body.

Consequently no case can be said to have been cured until we have given the deeper ramifications of the growth sufficient time in which to develop and manifest their presence. It is therefore important that before we treat the local condition a search be made for secondary deposits.

From the point of view of prognosis, this is a most important matter.

What means do we possess of showing the secondary spread of cancer?

The first important point is to remember the distribution of the lymphatics draining the area in which the growth shows itself. Improvements in radiographic *technique* enable us to carefully examine the thorax and other parts for secondary deposits. These may be found in the mediastinum, pleura, and lungs

A photograph which I show you is from a man, 24 years of age, who came for the treatment of a growth of the lower jaw. That in itself was a serious condition to deal with, because at that age the progress of a new growth is rapid and exceedingly difficult to check. An examination of the thorax revealed a large secondary growth in the right lung. One has to treat such a case, but the result can easily be foretold.

In another case which came for treatment, a parotid tumour had been operated upon on several occasions, and latterly the condition had practically disappeared under radium; the patient appeared to be in good health, but had lost a great deal of weight in a few months. In addition he complained of occasional attacks of dyspnœa of short duration. A radiograph revealed the condition shown on the plate; both lungs literally riddled with secondary growths.

A woman, æt. 55, had her left breast removed. She came for prophylactic X-ray treatment. The scar was free from secondary deposits. She, however, complained of a deep-seated pain at the upper end of the sternum. Secondary deposits were discovered in the anterior mediastinum.

One more interesting case may be quoted. A patient who had her left breast removed about a year ago came for the treatment of recurrent growth in the scar, axilla, and supraclavicular region on the left side. These are quite evident, and are undergoing treatment by radium. For several months the patient has complained of a severe pain on the right side of the sternum. It is deep-seated and of a gnawing type. Several screen examinations and radiographs failed to reveal the presence of a definite recurrence on the right side. She has, however, been carefully watched, and a few days ago another radiograph revealed the cause of her pain. A well marked secondary nodule can be plainly seen on the plate which I show you. In addition, on the left side, a supraclavicular gland is seen.

This case is most instructive. It illustrates a point I am rather anxious to emphasise, namely, that regular examinations at intervals should be carried out on all patients undergoing treatment, either curative, palliative, or prophylactic.

Selection of Cases for Radium Treatment.

This is probably the most important point in the whole question of the value of radium therapy.

What type of case responds best to radium?

It is unfortunate that the class of case which offers the best results in radium treatment should also hold out the best promise of success by operation.

The earlier we can treat a case of malignant disease the surer can we be of the result of such treatment. It is really unfortunate that such should be the case, because at the very outset we must decide between the two.

In the present state of our knowledge of radium and its effects upon new growth, we have no hesitation in saying that the choice must be given to early operation. The reason for such a statement is that we cannot tell when a case is going to do well under radium, and valuable time may therefore be lost if we use the latter, and an operation may in the end be considered necessary.

Two cases of the same disease, and to all appearances precisely similar, may react quite differently to radium. Further, should the growth not promptly yield to the treatment, it may happen that the stimulation of the tissues composing the growth leads to a rapid extension of the disease, secondary nodules appear at the periphery of the tumour and grow rapidly, or metastases may appear quickly in deeper parts. Even when to all appearances the growth has disappeared, sooner or later recurrences may follow, and this after what at the time seemed adequate prophylactic treatment.

To take examples, rodent ulcers when treated early are particularly amenable to radium. They remain healed for considerable intervals, yet in the end a small recurrence appears at the periphery of the ulcer, and if not promptly dealt with this may spread. Repeated recurrences have frequently to be dealt with in the same patient.

Admitting that in every early case of malignant disease operative measures should come first, there are some conditions when radium should have second choice :—

(1) The patient may refuse operation. Radium should then be the remedy of choice; though treatment in early cases may lead to a disappearance of the growth.

(2) Or the patient may not be in a suitable condition for operation. Again radium may be found useful.

(3) Or it may be that the operation must be so radical that the risk to life is great. Radium should here be given careful consideration as a remedial agent.

(4) Inoperable cases of malignant disease are generally handed over for radium treatment. Many of these cases are hopeless from a curative point of view. Here radium will relieve pain, diminish discharges, check hæmorrhages, and frequently heal up ulcers of considerable size.

The group of inoperable cases may be divided into two classes.

(*a*) Advanced cases of malignant disease, where it is obviously impossible to hope to do anything beyond the relief of the pain and other distressing symptoms which accompany the condition.

This relief is sometimes a marked feature in radium treatment. Discharges may be lessened, and where hæmorrhage is a feature in the case, especially if it be a general oozing from the growth and surrounding tissues, a sufficient exposure to the action of radium will lead to a cessation of the bleeding. Failing the prospect of achieving either of these results, such advanced cases should be left severely alone, as their treatment by radium can only bring discredit upon the remedy used.

(*b*) Less advanced cases, where there may be a prospect of inducing degenerative changes in the tumour mass which will lead to a diminution in size and possibly bring the case within the range of operative treatment.

This may be accomplished in a percentage of the cases we have to treat. I shall demonstrate to you later a number of cases where I think this end has been reached.

The method of treatment adopted must be through full exposures given at regular intervals and the patient kept under observation. The treatment may be external or, in selected cases, tubes of radium may be buried in the substance of the growth.

Inoperable tumours of the breast come under this heading.

Surgical methods may profitably be combined with the use of radium, and partial operations are a great help to the radium therapist, as it is quite rational to remove as much of the tumour as is possible in order to facilitate the use of radium. To take an example, a large fungating necrotic tumour of the breast is not likely to yield to radium treatment alone, while if the surgeon removes as much of the growth as possible, then radium may be employed on the portions of the tumour left behind. Secondary deposits in the glands and areas drained by the lymphatics may be vigorously treated by radium, and if a diminution in size is brought about, these may be removed at a subsequent operation. Life may be rendered more tolerable and undoubtedly prolonged by such measures.

Several such cases treated by radium and X-rays have shown marked improvement. Enlarged malignant glands have been successfully removed after reduction in size following upon radiation treatment.

While admitting the claims of operative measures in dealing with early cases of malignant disease, and with no intention of pushing the claims of radium, I should like to quote two cases which were in my own, and in the opinions of several surgeons, operable, but the patients refused operation and were treated by radium.

A case of endothelioma of the soft palate with a secondary gland in the neck was operated upon for the removal of the gland. A portion of the growth in the palate removed for microscopic examination showed it to be a slowly growing endothelioma. The palate growth was of considerable size; under radium treatment it slowly subsided and practically disappeared. The case was treated nearly three years ago; to-day the patient is in hospital for a recurrence of the growth in the posterior aspect of the soft palate. She has been quite comfortable during the time that has elapsed since she was first treated. I have no doubt she will derive benefit from further treatment by radium.

A gentleman, about 60 years of age, was referred to me for treatment of a growth in the right tonsil involving the soft palate and uvula. He was seen by several surgeons, but refused to have an operation performed. A section removed for examination showed it to be an epithelioma. A gland removed from the left side of the neck was inflammatory in character, a number of enlarged glands were present on both sides of the neck. Under radium treatment the growth slowly diminished in size, a portion removed later still contained malignant cells which were changed in character and surrounded by inflammatory products. The glands in the neck slowly subsided. To-day the patient is perfectly well and free from recurrence.

Types of Cases which have Received Benefit from Radium Treatment.

(1) *Rodent Ulcer.*—Early cases are readily influenced by treatment. They quickly heal, prophylactic doses should be given after the ulcer has healed. If the condition is quite superficial, the filtration need not be great. The beta ray action appears to exercise a profound change in these cases. After healing has taken place, filtered doses should be used to reach the deeper parts. Even after thorough prophylactic treatment recurrences are apt to follow at longer or shorter intervals. These frequently respond to further treatment. All cases treated should be kept under observation for a considerable time in order that an early stage of the recurrence may be observed and promptly treated.

When the ulcer is large and involves bone and cartilage the prospect of a cure is not so good. Most complete and powerful dosage may fail to check the progress of the disease. These cases may even be stimulated by radium treatment, and increase rapidly in size. In such cases it is better to combine surgical measures such as scraping or excision with radium treatment. Several cases so treated have healed and remained well.

(2) *Epithelioma.*—Growths in the skin are sometimes successfully treated by radium. Here again the excision of the growth and after-treatment by radium commends itself as a rational method of cure.

When the mucous membrane is involved greater difficulty is experienced in influencing the growth favourably. Some growths of the mucous membrane of the mouth and pharynx are hardly influenced by radium.

Epitheliomata which have healed may break down later and grow rapidly. Secondary involvement of glands must be treated as well as the primary growth.

(3) *Sarcoma.*—The round-celled variety seems to be the type of growth which is most readily influenced by radium. Large tumours may gradually diminish in size, smaller growths disappear, while secondary glands also clear up when treated. The spindle celled variety is not so readily dealt with, possibly because it is a more active type of growth. When the mediastinum is involved, exposures may be made over the sternum and ribs in the hope that the disease may be checked.

(4) *Cancer of the breast.*—Primary and recurrent.

This class forms a large percentage of the cases which are sent for radium treatment.

Secondary deposits may be met with in the glands of the axillary and supra-clavicular regions. These should be treated at the same time as the primary growth.

Secondary deposits in the cartilage of the ribs or sternum may also require treatment. Prolonged exposures to large quantities of well filtered radium have in several instances led to a diminution in the size of the growth.

(5) *Cancer of the œsophagus* has been treated with a beneficial result for a time. Patients so treated have gained weight and retained the use of the œsophagus up to the time they died of secondary growth in the mediastinum.

(6) *Cancer of the rectum.*—Symptoms may be relieved for a time. The radium must be passed into the stricture, otherwise it may act as an irritant to the healthy mucous membrane and increase of distressing symptoms so common in this situation.

(7) *Cancer of the cervix uteri* may also receive benefit from radium treatment. Hæmorrhage, and discharge are lessened and great relief of pain is a frequent result of treatment.

(8) *Cancer of the body of the uterus.*

(9) *Cancer of the bladder.*—If a tube can be introduced into the bladder and brought in contact with the growth, relief may be obtained.

Factors which are Likely to Influence the Result of Treatment.

In routine treatment by radium, the following factors should always be kept in mind, as a full consideration of all in each case will help us to foretell the degree of action and the result likely to follow from treatment.

(*a*) Type of growth and condition of patient.
(*b*) Situation of the tumour, size, etc.
(*c*) The quantity of radium used.
(*d*) The filtration employed.
(*e*) The duration and frequency of the exposure.

What factors are likely to lead to an improvement in the results at present obtainable by radium in the treatment of malignant disease?

(*a*) Larger quantities of radium may be used. Up to the present, the largest quantity used has been about one gramme of pure radium salt. Far-reaching effects may be produced by such a treatment, especially if the filtration is great and the exposure prolonged; yet, even with such a dose, the result in one or two cases has been a temporary benefit only. The type of case so treated has been a deep-seated growth which could only be acted on by the very penetrating rays.

For surface lesions, the increased dosage may have a speedier effect which should help to prevent the spread of the growth to deeper structures if it can be efficiently checked.

(*b*) A more thorough knowledge of the physical properties of radium may enable us to select for particular cases the quality of radiations likely to influence the cell metabolism.

(*c*) Improvements in the *technique.*

Up to the present it must be admitted that the *technique* has been more or less faulty. A knowledge of the various thicknesses of filters may help us to get speedier results. It may be that the use of the beta rays in some cases would lead to better results. Similarly the alpha rays, which up to the present have been little used, may in the future be found to exercise an inhibitory effect upon morbid processes when they are brought into contact with the cells of a growth. The difficulty has been to apply them at all. The radio-active waters at present in use do not appear to have any influence on cancer cells when administered by the mouth.

It may be possible to deposit the active principles of the radium emanations in such a way that we can utilise them either by direct application or by ionisation with the aid of a galvanic current, or a combination of radiations may be helpful; in several cases radium and X-rays appear to have hastened reparative processes.

It is possible that some of the effects we notice in cases so treated may be due to secondary radiations produced in the structures composing the growth which exercise a physiological action.

Some such general action appears to take place, because it is quite a common occurrence for patients so treated to improve in general health Further, the employment of radiations in any form leads to a constitutional disturbance which we designate as re-action. This varies in time of onset according to the dosage.

After a given time a period of depression sets in. It is most probably due to a change set up in the growth which leads to the liberation of toxines. The presence of these bodies in the circulation sets up the constitutional effects. If they are excessive, the condition of the patient may be rendered serious. This form of toxæmia is met with when large rectal growths are treated. It is possible to make the condition of the patient much worse if care is not taken to regulate the dose.

Up to the present, the treatment of malignant disease by radium and other radio-active bodies has been a purely local one. Consequently it cannot be regarded as a specific method of treatment.

Under what conditions are they ever likely to become so?

This question suggests possibilities which are at present being investigated.

The endeavour must be to procure a substance, radio-active or not, which, when introduced into the general circulation, will influence morbid processes in the tissues.

It may be possible to use a substance which when treated locally by radium, X-rays, or other agents capable of exciting the secondary radiations of such substances, will benefit the tissues.

Up to the present the best we have been able to do has been by local stimulation to produce secondary radiations from the tissues, blood and lymph, in the deposits of cancer.

When the secondary radiation value of these tissues is better known, and when we know which particular radiation acting upon them will give us their maximum value, then we may hope to improve our results.

The practical conclusions we can deduce from our consideration of the value of radium in the treatment of malignant diseases are:—

(1) In all cases of early cancer the operative method is undoubtedly the best; it is quicker, safer, and offers the best prospect of a cure.

(2) Radium is a useful adjunct to the treatment of all cases, first as a prophylactic after operation, and, failing operation, the next best method we possess. It must, however, be stated that X-rays are in selected cases quite as useful as radium.

(3) In cases which refuse operation or are for other reasons not suitable for operation, radium is a useful remedy.

(4) In inoperable cases, radium may help to render the case operable; and, failing that. is undoubtedly useful as a palliative measure.

Note.—The lecture was illustrated by a demonstration of the action of radium radiations on an electroscope, illustrating the action of filters in obstructing the rays. A demonstration of the emanation from radium in a flask coated with zinc sulphide. Mr. Phillips, the Honorary Physicist, demonstrated these points.

ORIGINAL PAPERS.

THE INFLUENCE OF THE DUCTLESS GLANDS UPON DEVELOPMENT. (a)

By HASTINGS GILFORD, F.R.C.S.,

Consulting Surgeon to the Reading Dispensary and Ringwood Sanatorium.

No one who attempts to assimilate the information upon the ductless glands which has been collected by Sajous, by Swale Vincent, by Biedl, by Cushing, or goes to the sources of their supply but must be struck with the growing importance of the subject. At the same time, it becomes evident that this information cannot as yet be brought to a focus. It tends to run along different lines—lines which are often divergent, sometimes parallel, and seldom meet. Two kinds of research are being conducted upon the subject, one clinical and pathological, the other experimental. The former is scanty but eminently suggestive; the latter copious, ingenious, and interesting. Experiment has led to the discovery of the hormones, has thrown light upon the nature of the changes wrought by the deficiency of secretions, and has furnished us with some valuable pharmacological agents. Indeed, the by-products of the investigation are perhaps even more valuable than those which have been attained as the main object of pursuit. We seem driven to the conclusion that information as to the uses of the ductless glands must still be gathered mainly from clinical, surgical, and *post-mortem* study. We must apparently expect very little direct practical result from investigations of the normal, but depend largely upon those of departures from the normal.

The subject we deal with is one of correlation, not so much of correlation itself as of the excitement or depression of correlation.

The whole series of correlations which terminate in the perfect balance and adjustment of organs of the vertebrate in his prime are probably in the first place mechanically induced. At any rate it has been shown by Bataillon (1) that the unfertilised egg of a frog may start on a career and continue up to the tadpole stage by means of needle puncture alone. In all probability, therefore, it is the mere mechanical penetration of the germ cell by the sperm cell which is the stimulus for the first correlations in all vertebrates, the fusion of sperm with germ afterwards supplying that blend of characters which constitutes complete fertilisation. There now comes a period of development in which there are as yet no ductless glands, when, as in plants, the necessary stimulus to correlation is both simple and direct. Here we see the beginning of two forms of co-ordinating stimuli. The contact of cell with cell and the conduction of primitive nervous impulses leads ultimately to that elaborate nervous mechanism which is responsible for the awakening of many of the correlations which take place in the post-natal human being. So also for a time there must exist in the primitive embryo some simple secretive mechanism which later on will be gradually segregated into organs and become ductless glands devoted to the production of hormones to excite and harmonise the action of widely separated organs. May it be suggested that this primitive faculty of cells is never lost, that in after life the ductless glands do not monopolise the power of chemical stimuli to correlation, but that all tissues possess some degree of the same property?

Local Correlations.

It may be in some such way as this that we account for local correlations. Thus when a segment of a long bone is destroyed in infancy the growth of muscle, fat, vessels, nerves, and skin does not continue as on a sound limb. On the contrary, a considerable degree of adjustment takes place. The growth of the soft parts is manifestly accommodated to the needs of the shortened bone. Moreover, such correlation is not solely the outcome of disuse, for we see a similar process at work in the limbs of the rickety and the achondroplasic. Local adjustments of this sort vary greatly in their completeness. Thus in some achondroplasics the soft tissues of the limbs are obviously disproportionate, the muscles and fat bulging in ungainly lumps, and the redundant skin being pleated into folds. But, as a rule the accommodation is much more perfect, and at its best even the trunk seems to be reduced in length to fit in with the altered circumstances, while its contained organs are moulded on a smaller pattern. It is true that achondroplasia is one of the disorders which has been attributed to the deficiency of pituitary secretion. But so far this relation is no more than suspected. The evidence is as yet so meagre that we are hardly justified in classifying achondroplasia either as a pituitary or as a sexual disorder. On the other hand, the locality and nature of the changes seem to point pretty conclusively to the skeleton as the prime seat of the disturbance.

Another disorder of early ascending development which appears to point to correlating influences apart from the ductless glands is microcephaly. In microcephaly there is marked stunting of growth in general. Nobody has as yet suggested that this stunting results from any hormonic deficiency. Neither does it seem probable that it is the result of trophic changes of nervous origin. It seems much more likely that we have here another example of the adaptation of the body at large to the contingencies of a defective organ. Such adaptation is variable and may be very defective. Thus the correlation of the growth of the calvarium to that of the microcephalic brain is sometimes decidedly inadequate. Bone seems to be formed as if for the protection of a normal brain, with the result that the ossifying membrane is pleated and the parietal bones fuse at the vertex and become heaped up into a prominent ridge. Soft tissues, moreover, may be correspondingly redundant so that the scalp fits badly. hanging loosely in folds, as if a few sizes too large for the brain it encases. The body and limbs, moreover, though actually stunted, are relatively too big, with the result that the brain tissue is not employed to the best advantage, that which should be devoted to the purposes of intellect being diverted to satisfy the less important requirements of the body and limbs. But sometimes the adjustment is much more complete, the body being smaller and the intelligence less defective. On rare occasions with a brain of microcephalic proportions the growth of the body is so adjusted that the intelligence is very little affected. Of such cases a good example was furnished by the celebrated dwarf General Mite, who at the age of 15 possessed a brain measuring no more than 41.5 cm. in circumference and yet showed a fair amount of intelligence. There can be no reasonable doubt that the retention of intelligence, despite this extraordinary smallness of brain, was due to the fact that he was only 82.4 cm. in height and 6.5 kg. in weight. Another instance of correlation of a similar character was the dwarf Edouard Placereau, about whose case there was a discussion in Paris in 1881. When 14 years old he was only 93 cm. high and the circumference of his head was only 39 cm.

(a) Paper read at the International Congress of Medicine, London, 1913.

The object I have before me is to emphasise the doctrine, first brought forward by Bernard, that while the ductless glands serve an important purpose in the correlations of the body they are only a part of the machinery of adjustment. For rapid adjustments the nervous system comes into play and for slower we have not only the ductless glands to consider but also that primitive capacity for adjustment which is inherent in the tissues of all parts of the body.

The Disorders of the Ductless Glands.

Out of the fog which at present obscures the subject now under discussion we seem to see gradually emerging a few clinical types of disease, the outcome of pathological changes in the different ductless glands. They are as yet very ill-defined, owing partly to the overlapping of their symptoms, partly to the variability of the effects produced by similar lesions, and, it may be, partly to the influence of other factors, such as those to which reference has just been made. Yet we are not without hope that we are on the right tack for the solution of the problem before us. It is right that we should co-ordinate our knowledge and formulate our theories even though all the time we are conscious that our knowledge and our theories are fallacious. I have therefore adopted the usual grouping of these diseases if only for the purpose of showing the difficulties with which any such classification is beset.

1. *The Thyroid Group.*—Largely owing to the superficial position of the thyroid gland, to its singleness, to its simplicity of structure and of function, we know more of its effect upon development than we do of any other ductless gland. This being the case we need hardly concern ourselves with its diseases except for the help they afford to the understanding of other groups. *Defective* action of the thyroid gland, as shown in cretinism and in myxœdema, makes us realise that the inaction of a gland at one stage of development may bring about results superficially different from those induced at another stage of development. In contrasting myxœdema with Graves's disease we see moreover that the *excessive* action of a gland does not necessarily produce symptoms opposed to those which result from defective action. For example, the conspicuous infantilism of cretinism cannot be contrasted with any premature senile decay in Graves's disease. Though the one is a dwarf the other is not a giant. The sexual system is in abeyance in the one but is not exaggerated in the other: neither is there any orbital change in cretinism opposed to the bulging eyes of Graves's disease. Lastly, the manifestly diminished function of the sex organs in cretinism is not balanced by any undue sexual exaltation in Graves's disease. At the same time we are convinced that the one malady is the antithesis of the other. Metabolism flares up in Graves's disease and smoulders in cretinism. Obviously under normal circumstances the thyroid presides over metabolism, and its effects upon different parts of the body are fairly equal. As for the para-thyroids we cannot as yet say whether they represent only undeveloped thyroid tissue or are possessed of some function subsiding to that of the thyroid.

The Lymphatic System.

The thymus, spleen, bone marrow, lymph glands and those outlying patches of lymph tissue to which Dr. Pye-Smith has given the name of lympharia are, like all other organs, liable to the extremes of growth and development. When *overgrown* we have the condition termed lymphatism. Lymphatic tissue. being relatively at its acme of functional activity during infancy and childhood is also then most liable to loss of control in the direction of excess. An infant in a state of lymphatism in its most characteristic form is fat and pale and stolid, though the intake of food may be under rather than over the average. If we can judge from the way in which lymph tissue increases in hybernation its office is one of conservation of tissue change. It apparently inhibits in some degree the action of the thyroid, the pars anterior of the pituitary gland and the sex organs.

Destruction of large tracts of the lymph system by degeneration as in Hodgkin's disease, gives rise to a syndrome in which, apart from the glandular enlargement, emaciation and debility are conspicuous. These may be contrasted with the fatness of lymphatism and with its occasional increase in muscular growth.

The Sexual System.

As in the case of the lymph system all attempts to influence growth or development by extracts from the sex glands have failed. Though the experiments of Berthold in 1849 strongly suggest that the sex glands act upon development through the medium of a secretion, the point cannot as yet be termed an established fact at any rate in all cases in which sex correlations are concerned. Perhaps one of the greatest of therapeutical triumphs is the extraordinary improvement which takes place in osteomalacia as the result of removal of the ovaries. Yet there is no evidence of any alteration in the ovaries themselves to account for osteomalacia nor to explain the good that is done by their removal. Moreover, we are not in a position to conclude that the series of changes which takes place at puberty is solely the result of the pouring out of secretion from the sex glands, nor are we justified in assuming that the changes at the menopause are solely due to the withdrawal of that secretion. The occasional presence of heterologous sex characters in hermaphroditism is very difficult to account for by the theory of hormones. Further, changes in the sex organs of plants are collelated with changes in other parts of the plant organism without the intervention of a hormone. If we assume that such hormones are essential we have still the problem to solve as to what initiates the changes in the glands which lead to their secretion. All that we are justified in saying is that a series of correlations become active at puberty and sink into a state of inaction at the menopause, and that the working of this machinery is apparently partly dependent upon the presence of a secretion from the ovaries or testes.

Pituitary System.

The fact that the pituitary gland is a double organ with satellites so greatly adds to the difficulty of estimating the effect of its diseases that it is at present possible to do hardly more than conjecture its influences upon normal growth and development. The trend of opinion is to regard acromegaly as the expression of excessive action of the pituitary followed by defective action. We therefore best arrive at our rough estimate of the relations of the pituitary gland to acromegaly by first noting what takes place when the gland is *defective*. And here we seem to get great help from experimental research, for Cushing and his school have shown very clearly that certain symptoms arise as the result of partial removal of the pituitary. (2) These symptoms are recognised as corresponding with those which are now widely known under the name of Fröhlich's syndrome. There is a state of moderate infantilism, the whole body being retarded in its development; inhibition of the sex organs; general obesity; some psychic and cerebral disturbance, and an increased tolerance for carbohydrates. It is true that Aschner (3) does not find the pituitary gland essential to life and that Handelsmann and Horsley's (4) cases show that such removal has none of the lethal or even deleterious effects ascribed by Cushing. But this negative evidence is at present overwhelmed by the positive and awaits confirmation. Then cases are recorded in which with infantilism, pronounced sexual defect and obesity there is no direct evidence of aplasia or disease of the pituitary gland. Some of these probably fall under the head of primary sex infantilism or feminism; others are examples of ateleiosis, such as will be referred to presently. We are only justified in regarding a case as one of Fröhlich's disease when there is definite and direct indication of the presence of a pituitary tumour or of hypopituitarism. Among the many puzzles which confront us in dealing with the disease of the ductless glands is to account for the fact that when portions of the hypophysis have been removed by operation or by injury, as in Madelung's classical case, the remaining portion, as well as the accessory glands, do not increase in size to make up for the deficiency.

If we adopt Cushing's view that acromegaly is due first to *excessive* and then to defective action of the pituitary gland we have great difficulty in accounting for those cases in which there is weakness and loss of sexual power from the beginning. Thus Prof. Schloffer (5) reports a case in which acromegaly, associated with symptoms of cerebral tumour, was treated by operation. Part of the pituitary was removed and found to be in a condition of simple hyperplasia. Yet all the symptoms were such as we associate with pituitary hypoplasia. Moreover, they were unmistakably improved by the operation.

Among the disorders attributed to defective action of the hypophysis are ateleiosis and progeria.

Ateleiosis is an essential infantilism of Brissaud's type. It has a striking individuality, and is clearly to be distinguished from myxœdème frustré. It is not amenable to treatment by thyroid extract, and sometimes occurs in two or more members of the same family, but not in association with cretinism or myxœdema. There are two forms, the asexual, in which none of the primary or secondary sexual characters is developed, and the sexual, in which, usually after some delay, the sexual organs develop, so that in a few cases these ateleiotics have actually borne children. I have myself seen one such case in which the intimate relation between the two forms of ateleiosis was proved by the fact that the father was of the sexual variety and the son of the asexual. In a case of ateleiosis, fully described by Arnold Paltauf, there was a tumour of the pituitary body. On the other hand in Schaaffhausen's case, in a skeleton in the College of Surgeons of Edinburgh, in another skeleton in the Royal College of Surgeons in London, and in a case upon which I myself made a *post-mortem* examination there were no gross evidences of pituitary tumour or inadequacy.

In *Progeria* there is still more reason to suspect the influence of hypopituitarism. It has been noticed that nearly all the characters of progeria are the antitheses of those which appear in acromegaly. This comparison has been insisted upon by Professor Keith, who, in the course of his study of a skeleton from a case of this disease, (6) showed that in almost every particular the changes were contrary to those of acromegaly. It is hardly possible to read his paper without being convinced that the one disease is opposed to the other. In only one point was the evidence at fault: the sella turcica showed no satisfactory indication of there having been any growth disorder or deficiency of the hypophysis.

SEXUAL GROUP.

It has been pointed out that in many cases of acromegaly some of the most conspicuous symptoms may possibly be due not so much to interference with the pituitary secretion as to the elimination of the sex influence, and this applies even more to Fröhlich's disease. The importance of this fact becomes evident when we remember that throughout the animal kingdom chronic or incapacitating disease is prone to be correlated with sterility. Just as there is a close association between the vigour of the body and the reproductive power so, generally speaking, any serious decline in the capacity of a vital organ tends in subsequent generations automatically to cease by the operation of sterility. They tend to produce not only individual but racial death. Thus alcoholism, plumbism, syphilis, all tend to sterilisation. Acute or chronic mental disease, amentia, dementia, obesity, diabetes, chlorosis, pernicious anæmia, leukæmia, achondroplasia and many other disorders are associated with aplasia or degeneration of the sex organs. In all probability, therefore, the sterility which is met with in Fröhlich's disease and in acromegaly is no more than the emphatic expression of a correlation commonly met with when the circumstances of the body are conspicuously abnormal. The importance of the reproductive apparatus in the ductless gland system can hardly be over-estimated. It seems to be the keystone of the arch and to be implicated in every disorder. Reasons have been given for doubting whether its influence is solely or even mainly exercised through the medium of a secretion.

SUPRARENAL SYSTEM.

The suprarenal system is another example of a double organ with attendant satellites. Though at present experimental evidence points unhesitatingly to the medulla as the dominant partner, the facts of pathology indicate quite as forcibly that it is the cortex which is of the first importance. Of all the diseases associated with these glands that of which we have most detailed and precise information is Addison's disease. The extreme muscular debility, the sensational bronzing of the skin, the low arterial tension and the progressive cachexia of this disease combine to form a syndrome of the most striking and vivid individuality. It seems clear that this combination of phenomena is due to grave suprarenal inadequacy. As a rule the inadequacy is tubercular in origin. But this is not the sole cause, for, according to Rolleston, there are cases in which the suprarenals have been in a state of defective growth or development, or have been almost destroyed by fibrous degeneration.

Turning now to the disorders which have been attributed to *overgrowth* of the suprarenals we meet with striking discrepancies. Diseases so produced have been described or collected by Bullock and Sequeira (7) and by Guthrie and d'Este Emery (8) in well-known papers. These disorders differ according to whether they occur in the male or in the female. In the female there is sexual and skeletal overgrowth with obesity; in the male skeletal and muscular overgrowth, sexual precocity, general hirsuties and obesity. These two types are termed the 'precociously obese' and the muscular or 'infantile Hercules' by Parkes Weber. Disease of this description seems to be in genuine contrast in certain cardinal respects with Addison's disease. At any rate the muscular overgrowth with corresponding strength, and the precocious virility are opposed to the muscular weakness, the cachexia, the emaciation, and the sterility of Addison's disease. And on examination of the body after death this contrast seems to be confirmed, for in most cases there is found to be a hypernephroma. Czerny, moreover, has reported the occurrence of five cases of hypoplasia of adrenal medulla with hydrocephalus. (9) Yet when we come to inquire a little further the evidence seems to be by no means convincing. Thus we read in one case that there was no normal suprarenal on either side, and the evidence of excessive action rested solely upon the presence of an abnormal collection of material of the size of a walnut close to the hylum of one kidney. This, it is true, was composed for the most part of tissue resembling that met with in adrenal cortex. But it was a tumour formation of the nondescript order we term hypernephroma, much of it being in a state of degeneration, some of it suspiciously like carcinoma. Now these are not the appearances which we associated with an exalted activity, but on the contrary with impairment of function. If appearances were deceptive and the tumour tissue was really functionally active we should have expected a collection of the size of a walnut to produce more effect than two normal suprarenal capsules. Are we to infer that there was congenital absence of the suprarenals with compensatory hypertrophy of an aberrant gland proceeding to an extreme and ending in functional hyperplasia? If so, we have to deal with a state of affairs which does not occur elsewhere. Moreover, if a small hypernephroma produces such an effect, why do we not have a similar or much greater somatic overgrowth with the huge hypernephromata which sometimes occur without obesity? Then again, exactly similar changes are found in association with tumours of the ovary, of the testes, of the thymus, of the pineal gland! Yet again, similar tumours may be found with genital aplasia, as in Marchand's case, or with emaciaton. Evidently we can go no farther until we have received further evidence; the discrepancies are too many and we receive but little help from experimental research. From the evidence which we now possess we are far more justified in attributing the tumours to the infantile gigantism than we are the gigantism to the tumours, for in all these cases which have been reported the most constant array of phenomena are the overgrowth of the fatty, muscular, bony, and sexual systems, the tumour formation being erratic in situation, variable in size, and even uncertain as to its existence. Indeed, in most cases adenomata or hypernephromata are only found accidentally at *post-mortem* examinations, having given rise to no symptom whatever.

Nothing can more clearly show the need for caution in dealing with this subject than the fact that absence of adrenal glands in the fœtus is sometimes associated with an encephaly. We are no more justified in assuming a causal relation between these two malformations than between a cleft palate and a spina bifida. Moreover, we meet not only with anomalies of other ductless glands in association with sex precocity, but local developmental disorders of the extremities either by excess or defect. Indeed, one of the cases which is often quoted in favour of the suprarenal origin of excessive somatic growth should in reality be regarded as evidence against it. This was Hutchison's case of hemi-hyperplasia, in which adrenal hyperplasia occurred on the same side as the somatic. It is almost inconceivable that a secretion poured into the blood-stream from one of a pair of organs should influence the growth of only one side of the body.

The conclusion to which we seem to be entitled is that the suprarenal cortex is, like many other organs, correlated with the sex glands and with the formation of fat, and that when there is abnormal growth of the reproductive apparatus there is apt to be an associated disturbance in the adrenal cortex, but we are not justified in assuming that the one malformation is the cause of the other.

Conclusions.

We now come to the question as to the causes of the defective or the excessive action of any ductless gland. For the answer we have to go to genetics. This branch of biology shows that as there is a normal size and a normal action so also it is as inevitable as light to darkness that size and function must occasionally become abnormal and fall into extremes. Hence every plant, every animal, every organ is liable to the extremes of growth or of development. Variations of this sort may be either spontaneous and hereditary so as to constitute mutations, or they may be the result of less emphatic changes and be fluctuations. These latter are in varying degrees influenced by environment. I need go no further into this subject, for it has been dealt with elsewhere. (10) The criticism which naturally follows is to question the utility of terming a disease a variation. The reply is that it carries us on one stage further, brings the disease into line with the facts of biology, and enables us more rationally to trace its origin, understand its purpose, and provide for its treatment than if we regard it as a mere *lusus naturæ*, appearing without rhyme or reason.

By studying these extremes we arrive at some sort of conclusion, however hazy, as to the normal action of the glands in question. We find that by virtue of their secretions or in some more cryptic manner they preside over certain correlations of the body. These correlations are by no means rigid, but are indeed exceedingly variable, and this variability is most apt to be shown when crcumstances are abnormal. The adjusting mechanism of development is not only flexible but is more or less reciprocal, so that a ductless gland both influences development and is itself influenced by the changes of general development.

In the harmony which is produced by the concerted action of the ductless glands we have reason to suppose that the leading part is played by the thyroid. This supplies a stimulus for the metabolism of the body as a whole. During infancy and childhood, when it is most important that the fires of metabolism should be controlled, the influence of the thyroid is checked by the thymus gland, by the lymphatic system in general and perhaps by the pineal gland. These also bring about that delay of sexual activity which is so essential to the proper maturation and stability of the somatic faculties. Probably the first to break through this cordon of conservative influences are the adrenal glands, which awaken the dormant sexual organs and hasten the growth of the muscular and skeletal systems. At about the same time the skeletal system is still further stimulated by secretions from the pituitary gland. This secretion hastens the development of every organ in the body, including the sex organs. These latter now ripen apace, and, assisted by the combined action of the ductless glands, sometimes animating, at others restraining, carry the development of the body in waves and tides to its flood.

References.

(1) "The Physiology of Fertilisation," Professor Keeble, *Gardener's Chronicle*, 1912, p. 457.
(2) Cushing, *The Pituitary Body and its Disorders.*
(3) Aschner, *Pflug. Arch.*, 1912, Bd. cxlvi., H. 1, 2, 3, p. 1.
(4) *Brit. Med. Journ.*, 1911, vii, p. 1150.
(5) *The Lancet*, 1907, p. 1528.
(6) *The Lancet*, 1913, vol. clxxxiv. p. 305.
(7) *Trans. Path. Soc.*, vol. lvi, 1905, p. 189.
(8) *Trans. Clin. Soc.*, 1906, vol. xl, p. 175.
(9) *Centralbl. f. Allgemeine Pathologie*, 1899, S. 281.
(10) *The Disorders of Post-natal Growth and Development*, Adlard & Son.

USE AND ABUSE OF HYPNOTICS. (*a*)

By W. H. WILLCOX, M.D., F.R.C.P.Lond.,
Physician to Out-patients St. Mary's Hospital, London, W.

It will be well clearly to define what is meant by the term "hypnotic." In its broadest sense it means a remedy for inducing sleep, and no doubt general measures, for example those of hydrotherapy, electricity, etc., might be rightly regarded as hypnotic in action. For the purposes of this discussion, however, it will be necessary to restrict the term "hypnotic" to the following definition:—"A drug or combination of drugs which produces sleep resembling natural sleep."

In every case of supposed "insomnia" it will be well first to make quite sure that absence of sleep really exists. Not infrequently a patient imagines that he has had a sleepless night, whereas he may have slept for several hours.

When insomnia really exists it must be remembered that this condition is only a symptom, and its cause in every case must be very thoroughly and carefully investigated.

The immediate recourse to hypnotic drugs is greatly to be deprecated, since frequently harmful results follow this procedure. Not only is there danger of the development of a drug habit, but commonly the

---

(*a*) Abstract of paper read at the eighty-first annual meeting of the British Medical Association at Brighton, 1913.

patient develops a sad lack of self-reliance, and is apt to think that he cannot exist without these artificial aids to sleep.

It must also be remembered that sleep induced by drugs is not the same as natural sleep, and has not the same beneficial value.

The following classification indicates the common causes of insomnia and the use of hypnotics may be necessary in any of them.

1. *Pain,* and other conditions which act as sources of irritation and prevent sleep, *e.g.,* cold, heat, light, irritative bed-clothing, eye strain, adenoids, pruritus, etc., etc.

2. *Nervous Causes.*—(*a*) Psychical causes in the sane, *e.g.,* mental emotions, as grief, worry, shock, etc. Intellectual overwork, change in the mode of life, neurasthenia, hysteria, hypochondriasis, etc. (*b*) Cerebro-spinal causes, *e.g.,* cerebral irritation, meningitis, etc. (*c*) The insomnia of insanity.

3. *Toxic Causes, e.g.* (*a*) Microbic and parasitic infections, as pneumonia, typhoid fever, influenza, rheumatism, etc. (*b*) Chemical poisons, as alcohol, tea, coffee, lead, tobacco and the insomnia so characteristic of the drug habit. (*c*) Auto-intoxications, *e.g.,* gout, renal disease, fatigue, etc.

4. *Gastro-Intestinal Causes, e.g.,* dyspepsia, dilatation of the stomach, constipation, and the various diseases of the gastro-intestinal and alimentary organs.

5. *Cardio-vascular Causes,* such as arterio-sclerosis, angina pectoris, and diseases of the pericardium, myocardium or endocardium.

6. *Respiratory Diseases, e.g.,* asthma, bronchitis, pneumonia, etc.

7. *Genito-urinary Diseases.*

8. *The Insomnia of Physiological Epochs, e.g.,* menopause, old age.

It will be universally agreed that in every case of insomnia, after having carefully determined the ætiological factors, the first therapeutic measures should be directed towards the

Treatment and Removal of the Cause.

Any pathological condition present, should be treated by those special therapeutic measures most suitable for the particular case.

In addition, general measures for promoting sleep should be carefully considered and recommended, such as a modification of the mode of life and habits of the patient as regards work, rest, diet, exercise, smoking, etc. The conditions of the bedroom and bed itself as regards comfort, quiet, proper ventilation, warmth, etc., should be made suitable. The taking of a hot drink before bed time may be found to suffice. Simple measures of hydrotherapy such as baths, douches, and in severe cases warm or cold packs, may be employed before hypnotic drugs are given. In some cases massage, or electrical treatment have been found helpful.

The dangers and objections attaching to the use of hypnotics should always be carefully borne in mind. They may be summarised as follows:—

1. *The Unnecessary Use of Hypnotics.*—There should always be a real necessity for the employment and continued use of hypnotics for reasons given above.

2. *The Danger of the formation of a drug habit.*—This applies especially to certain hypnotics, such as morphine and opium preparations, veronal, chloral, paraldehyde, etc.

3. *The Danger of Toxic Symptoms resulting from the use of hypnotics.*—A single medicinal dose of a hypnotic drug may cause unpleasant and even alarming symptoms, and the continued use of these remedies may produce toxic symptoms, either by the simple effect of a repeated therapeutic action, or as in the case of drugs which are slowly absorbed, such as sulphonal, trional, etc., by a cumulative action.

The cumulative action of drugs which are slowly absorbed is often prevented by the avoidance of constipation.

4. *The Danger of Fatal Poisoning.*—Fatal poisoning is generally due to the patient gradually increasing the dose of the hypnotic, unknown to his medical adviser, so that ultimately a dose is taken which produces dangerous of even fatal symptoms.

5. *Special dangers due to existing disease, or age of the patient.*—In certain diseases there is a greatly increased susceptibility to particular hypnotics, *e.g.,* morphine and preparations of opium are especially potent in renal and respiratory disease and in cirrhosis of the liver; also in children these hypnotics must be prescribed in very small doses.

6. *Idiosyncrasy.*—Certain individuals have an increased susceptibility to some hypnotics, so that a large dose should not be given for the first time.

7. *The use of hypnotics when other measures of treatment should be employed.*—In many cases instead of giving hypnotics, the giving up of work and the adoption of some special treatment ought to be advised.

The Principal Hypnotics.

I. *Derivatives of Methane.*—These may be subdivided thus:—(*a*) *The Chloral, Alcohol Group, e.g.,* chloral, chloralamide, chloralose, butyl chloral, chloretone, hypnal, dormiol, isopral, viferral, ural, bromal, alcohol, paraldehyde, amylene hydrate, aponal, neuronal.

(*b*) *The Sulphonal Group.*—Sulphonal, trional, tetronal.

(*c*) *The Ureide Group.*—Urethane, hedonal, veronal and its derivatives, medinal (sodium veronal), proponal, luminal and sodium luminal, codeonal, adalin, bromural.

II. *Opium and its preparations and alkaloids and their derivatives.*—The various official preparations of opium, morphine, and its preparations:—Codeine, apomorphine, heroin, dionin, omnopon.

III. *The Atropine group of hypnotics.*—Atropine, hyoscine or scopolamine, hyoscyamine, the vegetable preparations of hyoscyamus, stramonium and belladonna.

IV. *Cannabis Indica and its preparations.*

V. *The inorganic bromides.*

VI. *Vegetable hypnotics other than those mentioned above,* such as hops, sumbul, etc.

VII. *Other hypnotics.*—Phenacetin, acetanilide (antifebrin), phenazone (antipyrin), pyramidon, aspirin, novaspirin, camphor monobromide, pellotine, etc.

Many of the abuses of hypnotics have been indicated in the above remarks. In addition, it is important to bear always in mind the dangers of "self-drugging" on the part of patients. Every patient taking hypnotic drugs should be impressed by his medical adviser with the undesirability of taking these except in real necessity. In giving prescriptions for hypnotic remedies the drug prescribed should be dispensed in such a way that the patient will not be induced to purchase the remedy for himself and dose himself. Bottles of tabloids of hypnotic drugs should never be supplied except with a written label according to the directions of the prescription (the printed trade label should not be on the bottle). It would be most desirable if definite hypnotic drugs were only supplied on the prescription of a medical man. In the case of drugs of a powerful hypnotic action it would be desirable if medical practitioners wrote on the prescription: "Not to be repeated."

Many of the abuses of hypnotics can be prevented by a loyal co-operation of pharmacists with the medical profession, and this co-operation will be to the great advantage of the public and all concerned.

INFECTIOUS ARTHRITIS. (a)

By EDWARD L. COOLEY, A.B., M.D.,
St. Louis, Mo., U.S.A.

Under the above caption may be classed all pathological joint processes which simulate, clinically or histologically, those diseases wherein bacteria or their toxins induce lesions elsewhere in the body. In joint inflammations the cause, for the most part, is traceable to some specific infectious agent. The more acute or abrupt the onset, the more readily can the nature of the cause be inferred. The resultant tissue changes are due either to the organisms them-

---

(*a*) Paper read at the International Congress of Medicine, London, 1913.

selves or to the presence of their toxins. Absolute demonstration of the infecting agents themselves *in situ* is extremely difficult, often impossible, as they may lie remote from the involved tissues, and the trouble be due to the presence and activity of their toxins. It has been contended that toxins do not cause joint inflammation; this contention being based upon the fact that toxin cultures injected into joints do not give rise to such pathological states. As opposed to this view, it can be urged (1) that oftentimes no infecting bacteria can be demonstrated at the site of the lesion or in the contiguous tissue, even in very acute cases. It is hardly presumable that such bacteria are so short lived, or that they are present in such small numbers as to escape detection.

(2) Anaerobic cultivation of the "smears" might not produce the same results as those obtained by aerobic methods. In the light of present knowledge we are not warranted in discarding the theory that probably the majority of chronic poly-articular inflammations are the result of toxins.

Ætiology.—In seeking the cause of these pathological processes all sources of infection, remote or recent, must be investigated. Infectious diseases, especially in the young; tonsillar inflammations particularly if recurrent; earache with or without suppurating sinuses through the tympana; evidences of syphilis; the presence of cardiac, particularly valvular, lesions; glandular enlargements with or without suppuration; intra-abdominal or intra-thoracic suppurative processes; all should be viewed with suspicion and investigated as possible causes. Chronic intestinal trouble, puerperal sepsis, long-standing low grade inflammation of the uterus and adnexa, inflammation of the deep urethra, prostate and seminal vesicles in the male, are competent factors in the causation, and pneumonia and la grippe are frequent causes of joint involvement.

All of the above factors have been held responsible for joint affections in some form or other.

Method of onset.—In determining the infectious nature of an arthritis the character of the onset is of great significance. It may be said in general that infectious processes begin abruptly and suddenly and quickly reach the climax. This is certainly true of the graver forms, *i.e.*, those following gonorrhœa. In some instances the onset may be slow. As a rule, the suddenness and gravity of the onset is more or less in direct proportion to the virulent infectivity of the organism; so that a failure to conform to the general rule does not militate against the infectious character of the arthritis. Another characteristic of this trouble is its poly-articular appearance from the onset. The first joints may be only mildly involved and of transient duration. The attack finally concentrating upon a few joints, possibly only one or two, which become permanently involved.

As a rule, the fewer joints involved, the more severe the attack. Another significant fact, though not infallible, is that the infectious process practically involves all the articulations liable to attack at the onset; herein differing from other forms of arthritis wherein the tendency is spread *ad seriatim* to other articulations.

Physical signs.—These vary with the severity of the infection, though in all persist the classical signs of an inflammation. In addition, there are limitation of motion, impairment of function, muscular spasm, and, later on, deformity. As secondary symptoms and evidences of toxæmia, general glandular enlargement, splenic and hepatic hypertrophy, cardiac complications, anæmia, slight but constant deviation of temperature, and an habitually high pulse-rate may be present, in all or in part. The chief subjective symptom is pain, which in severe cases becomes very annoying; interfering with sleep, causing loss of weight, and often a high degree of anæmia.

Pathology.—In the present state of our knowledge little or nothing can be hoped for looking toward an absolute differentiation of the various organisms and their toxins as cause and effect. Any attempt to associate pathologic appearances with any given variety of organisms or their toxins becomes infinitely difficult and the results uncertain. The following points, however, may be noted: (1) the appearance of the synovial side in the infected joints. Here the fibrous and synovial capsules, especially in severe affections, are adherent and difficult to differentiate, the cavity obliterated, and the interlocking adhesions so firm as to resist any separating force. Owing to the hyperæmia accompanying infective processes the vascularity is great and adhesions form more readily than in other forms or arthritis. (2) The sub-synovial part is usually entirely obliterated by infiltration of the tissues with round cells and the products of a low grade inflammation. This infiltration is much greater in infectious cases than in other forms of arthritis; consequently the combined thickness of the synovial membranes is usually greater than that seen in other forms. Upon opening the joint cavity much villous thickening may be present, differing in character from that seen in other forms of joint troubles. The more chronic the infection, the greater the liability to marked villous change. (3) An excess of fluid can, as a rule, be demonstrated in these joints, varying all the way from pus to a turbid exudate wherein flakes of inspissated fibrin may be present.

Bacteria.—It is very probable that attenuated members of the principal families of bacteria may and do produce the mild forms of infection, but of this we have no definite knowledge. In the case of streptococcic infection, it would be impossible to distinguish between the large numbers of varieties of this organism that might be present. The staphylococcus is never responsible for poly-articular infections and rarely for mon-articular ones save in direct infections from without, as part of a general pyæmic process, or due to the extension of a juxta-articular osteomyelitis. The gonococcus is a prolific source of infection; and the pneumococcus, bacillus coli communis, and others have likewise been traced as causes; but the majority of the chronic poly-articular infections are probably due to the so-called "Schuler's organism," not yet isolated; and until more accurate knowledge along this line is forthcoming all that can be definitely said is that some organism other than the well-known types is very likely responsible for chronic forms of joint infections.

Treatment.—Recognising an infectious element within the body as the cause of this form of joint disease, and that activity of the disease means a similar activity of the cause, the first step in the treatment is to locate the source of the infection and attempt its removal. If for any reason this source cannot be located, every effort should be made to increase the resistance of the patient and make the organism itself control the spread of the disease.

Hygiene, which is chiefly depended upon in dealing with tuberculosis, is of similar value in these cases; systemic resistance to one group of organisms infers a similar ability upon the part of the organism to resist the attacks of another, and what is efficient in one is relatively so in others. The same can be said relative to tonics and dietetics. In fact the general treatment of chronic joint affections of this type parallels very closely that of tuberculosis, *i.e.*, early recognition, absolute physical and mental rest, and life in the open air. In this form of arthritis, if ever, and then only in the more acute stages, is a restricted diet indicated.

In the sub-acute and chronic stages, ingestion of whatever food agrees with the patient is desirable, and in many cases forced feeding should be practised The cardinal points, therefore, in the general treatment of all sub-acute and chronic cases are: (1) Wholesome food: (2) Good hygiene; (3) Comparative freedom from pain. The use of drugs is incidental and employed only to meet the exigencies of the hours.

Local treatment—The demands in this field usually call for all our resource and skill. Here two cardinal points obtain. (1) Absolute immobility of the affected parts; (2) the earliest possible evacuation of pus and subsequent adequate drainage. The immobility must be absolute to be effective; no half-way measures will suffice. Fix both proximal and distal joints. If the knee-joint be the one involved, fix both hip and ankle-joint in a plaster cast, cutting out a window over the inflamed joint if necessary. So with any joint implicated. *Absolute fixation* lessens pain, diminishes swelling; limits peri-articular infiltration, and prevents deformity. It must not be forgotten that while rest is the initial step in the treatment, it is not always the foremost indication at the outset, and under certain conditions more radical measures must be adopted. Suppurative pyæmic joints which are frankly so from the onset will brook no delay. These must be treated on the broad principle of giving vent to the abscess within the joint cavity by as thorough methods as possible, sacrificing anything to that end. In some toxæmic joints where the trend is progressively bad, as indicated by constant high temperature, great sensitiveness, and excessive pain, the joint should be opened, thoroughly irrigated, existing adhesions broken up, the capsule closed, and a silk seton inserted for temporary drainage; then fix the limb in the most favourable position for function should ankylosis ensue. Where surgical interference of this character is necessary, it should be followed up as soon as possible by passive and active joint manipulation with early massage and hydrotherapy. These measures facilitate the early absorption of any infiltration of the capsule which may have rendered it stiff or inflexible, prevent formation of permanent adhesions, and break up those already formed. Some cases may require an arthrotomy in order to remove the products of inflammation, as inspissated fibrin; or to dissect out hypertrophied villi which may either contain the organisms responsible for the infection or mechanically curtail the free use of the joint. Complete regeneration of the synovial membrane usually takes place if only a little of the endothelial tissue is left; hence a very free dissection of the capsule can be made without risk of damaging adhesions resulting therefrom. When the object is simply the removal of villi, the lateral incision instead of severing the patellar tendon or going through that bone should be one of choice, on account of the greater likelihood of regaining motion.

Patellar section should be reserved for suppurative cases where free drainage cannot be secured by lateral incisions. In the after treatment determined effort should be made to overcome deformity and restore function. In a certain percentage of cases this can be accomplished by massage, electricity, and hydro-therapy. Others, again, will demand more radical measures, as the injection of sterilised oil, etc. The use of thick pads of fat or fibrous tissue dissected up from surrounding parts and turned into the articulations covering the crowded surfaces. This latter method is more applicable to the hip, shoulder, and elbow-joints, where a limited motion will suffice. In the knee and ankle, this procedure is not of much advantage because the amount of motion is too limited. Cargile membrane has been used where fat or fibrous tissue were not at hand, but this material was found too absorbent for the purpose. In those cases where the destructive processes have been great, and marked deformity has resulted, osteotomy and resection of the joint must be resorted to. Sometimes a tenotomy of contracted tendons, with the clearing out of the villi and old adhesions within the joint will suffice. Where the object is to correct deformity and restore function, ankylosis having already supervened, osteotomy is the operation of choice. Never disturb an old ankylosis if it is complete, if by any possibility it can be avoided and the deformity corrected.

In incomplete ankylosis a resection is indicated but recurrences are by no means infrequent. It requires two or three years to secure firm osseous union after a resection, while two or three months is the limit in osteotomy. Do not be in too great a hurry to remove the cast. The patient should wear a plaster cast at least one year after a resection and a walking splint for the same length of time thereafter to ensure permanent results. In carrying out the expectant plan, if after a lapse of two years bony ankylosis does not result it is useless to wait longer; a resection of the joint is indicated, provided always that the villi and other impedimentous tissue have been cleared away, for complete ankylosis will not take place so long as these products of the inflammatory processes remain.

ERGOT AND ITS PREPARATIONS. (*a*)

BY F. H. CARR, F.I.C.,

AND

H. H. DALE, M.A., M.D.

SINCE the last revision of the British Pharmacopœia in 1898, our knowledge of the chemistry and pharmacology of ergot has been advanced to so great an extent that it is now possible to devise processes for the official ergot preparations based upon the known properties of the active ingredients instead of adhering to the empirical methods

---

(*a*) Abstract of Paper read before the British Pharmaceutical Congress, July 23rd, 1913.

which were necessarily adopted at the time of the previous revision.

In a paper by Carr and Dale read before the British Pharmaceutical Conference on July 23rd, it was shown that the properties of the most important active substance in ergot, namely, the alkaloid ergotoxine, are such that the usual methods employed for making extracts of ergot tend to exclude rather than to include it; an explanation is thus given of the uncertainty with which these preparations are regarded by some members of the profession. The authors further recommend processes by which pharmacopœial preparations of high activity may be made.

The chief active principles of ergot are ergotoxine, *p*.-hydroxyphenylethylamine ("Tyramine") and *β*-aminazolylethylamine ("Ergamine"), all of which can now be obtained in pure crystalline condition.

The alkaloid ergotoxine is the essential active principle of ergot and is capable by itself of producing the true therapeutic effect of ergot. The amines, "Tyramine" and "Ergamine," have also an important stimulant action upon the muscular wall of the human uterus, and their presence in ergot extracts is a useful adjuvant to the action of the ergotoxine; to the latter, however, greatest importance is attached. Although the amines are readily extracted by water, and so are present in extracts and infusions, ergotoxine has properties exceptional in an alkaloid, whereby it is very apt to be left unextracted or to be precipitated from solutions. Its salts are very little soluble in water, though they may form colloidal solutions from which they are thrown down by strongly ionised acids or their salts. Ergotoxine is unstable in the presence of alkalis, while heating with strong alcohol converts it to inert ergotinine.

With a knowledge of these properties the reader will easily understand what the authors have actually found to be the case, namely, that as made under pharmacopœial directions both the Extractum Ergotæ (Ergotin) and Extractum Ergotæ Liq. possess but an insignificant proportion of the activity of the ergot, for in the former instance the alkaloid extracted initially by alcohol is precipitated firstly by the removal of the alcohol during evaporation, and, secondly, by the addition of hydrochloric acid; such addition would precipitate ergotoxine from pure solutions, but in this instance the process is facilitated by the absorbent action of the resins also thrown down; while in the latter instance the liquid extract, which is made with water, contains only a very small proportion of the sparingly soluble ergotoxine, the amount so dissolved being slightly greater in the case of a particularly acid ergot or if fermentative changes set in during the process. These extracts are rich in amines, and to such they chiefly owe what activity they possess, which, however, does not in any way represent the true clinical value of the drug.

On similar grounds the Infusum Ergotæ is criticised, while the instability of the ammoniated tincture is accounted for by the action of the added alkali.

The authors propose a revision of that section of the British Pharmacopœia relating to ergot, and indicate the following changes:—

1. The present Extractum Ergotæ to be abandoned and, if necessary, a soft total extract made with 60 per cent. alcohol acidified with citric acid, substituted for it.

2. The fluid extract of the United States Pharmacopœia, made with 49 per cent. alcohol, containing 2 per cent. of acetic acid, should take the place of Extractum Ergotæ Liq.

3. The Injectio Ergotæ to be abandoned and suitable salts of ergotoxine, either alone or combined with the active amines, Ergamine and Tyramine, to be employed in place of it.

4. The adoption of a liquid extract such as that described would render the tincture unnecessary, but such if retained should be made by percolation with 60 per cent. alcohol without ammonia.

Another point of interest noted is that it has been shown by testing ergots of other grasses, such as that of wheat and of a wild grass from New Zealand called Festuca arundinacea, that they possess even more activity than Ergot of Rye, Ergot of Festuca being found approximately three times as active as good Rye Ergot, and Ergot of Wheat slightly more active than the latter. The authors suggest that if an acceptable method of testing ergot can be found, such ergots should receive official sanction.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Carcinoma of the Breast.—Mr. Willmott Evans operated on a woman, æt. 64, who had been admitted for a swelling of the left breast. She had noticed the swelling for about a year, but she had not considered it of any importance as it gave her no pain. It had steadily increased in size, and ultimately she had had some twinges of pain in it, and then she came to the hospital.

On examination, the left breast was seen to be obviously enlarged, and a mass was felt in it involving mainly the upper and outer segment; the nipple was somewhat contracted; the skin was adherent over the tumour and dimpled, and when the pectoralis major was put on the stretch the tumour was found to be clearly adherent to the underlying muscle. The mass was hard and obviously situated in the substance of the gland. On examination of the axilla several enlarged glands were felt, situated mainly on the upper side and fairly firmly fixed. Nothing could be felt above the clavicle, and there was no evidence of the existence of any secondary growth. The patient's general health was good and there was no cachexia.

A diagnosis of carcinoma of the breast was made, and it was decided to operate. An incision was made, starting about an inch above the xiphoid cartilage, passing about three inches above the nipple, and reaching to the tip of the acromion process. A second incision was made, commencing at the same spot, and passing three inches below the nipple, and joining the first incision about an inch below the tip of the coracoid process. The skin was raised from the axilla, the tendon of the pectoralis major was cut through near its insertion, the pectoralis minor was divided, and the contents of the axilla were removed completely, the axillary vessels and the brachial plexus being fully exposed as far as the apex of the axilla, the first and second digitations of the serratus magnus being clearly seen. The mass thus removed was wrapped in gauze while the breast was dissected out; this was then taken out in one mass with the axillary contents, and with it were also removed the sternal portion of the pectoralis major and the tissues between it and the pectoralis minor. All bleeding was arrested, and then it was found that it was possible nearly to cover in the raw surface by suturing the skin. No drainage tube was employed; gauze dressing and cotton wool were applied and then a bandage, the arm being left free.

Mr. Evans said there were several points of importance in this case. As to the diagnosis there could be no doubt: the hardness of the mass, the retraction of the nipple, the adhesion of the mass to the skin and to the muscle, and enlargement of the glands left no room for difference of opinion. The question, however, arose as to whether the case was one suitable for operation. It was by no means an early case; all the signs Mr. Evans had enumerated showed that; besides, the involvement of the axillary glands was extensive. But, on the other hand, the supraclavicular glands showed no evidence of involvement, therefore he considered that it would be worth while to attempt removal, though the ultimate prognosis could not be called good. With regard to the incision, it was important, he said, to remove sufficient skin; in his opinion it was desirable not to let the incision enter the axilla at all, but to keep it well up on the shoulder. It was always desirable to remove part of the pectoralis major, but it was not necessary in the majority of cases to take away any of the pectoralis minor, though it was important to cut this muscle across, as this facilitated greatly the clearance of the axilla. He thought it important not to fix the arm in any way, but to allow it to assume any position the patient wished. In this way it was possible, he considered, to obtain greater mobility of the arm subsequently than by any other method.

The wound healed by first intention excepting for an area some inch and a half square where the flaps had not met; this area was subsequently covered with a skin graft. The patient left the hospital three weeks after operation.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug. 30th, 1913.

At the Laryngological Society, Hr. Hölscher showed a case of

TOTAL EXTIRPATION OF LARYNX AND PHARYNX.

The operation had been performed a year ago. There was nothing specially of interest in the operation itself, but later, in the carrying out of plastic procedures, there were difficulties chiefly in that in consequence of the skin incision the nourishment of the flaps required in the plastique of the pharynx was unfavourably influenced. It was understood that in cases of extirpation of the larynx and pharynx the skin flaps were again united and fixed by tampons against the vertebral column. As the nutrition of these flaps appeared to the speaker to be endangered, he had, as a rule, made two. The flaps were here separated, turned round, and sutured to each other, so that the epidermis lay inwards. It required no explanation, therefore, that the nutrition of these flaps was influenced unfavourably. As a matter of fact, necroses of them sometimes took place. In the case before them, such a necrosis took place just above the tracheal opening. Here an opening was formed. After recovery had taken place so far, another operation was performed, in which complete closure, as intended, did not occur. Necrosis of a small portion again followed, which, however, contracted so much that by Christmas it was only threadlike. Another operation was then performed by a colleague, but no success followed, the opening, in fact, became larger—9 to 10 mm. in diameter. For the patient it was, of course, the reverse of agreeable; from August to the following April she had to feed herself through a nasal sound. She objected at the time the speaker saw her again to immediate further operation, but she wished to get free of the sound feeding. He first tried to block up the opening by a rubber knob. A flattened knob was made of soft rubber, and this was so firmly held against the edges of the wound that it formed an almost watertight closure. The patient could now eat and drink, but the arrangement could not, of course, be a permanent one. He hoped shortly to try another plastic operation, which might be more successful.

Then the patient experienced a misadventure. She fed herself through the sound, but one day in October of last year, she had forgotten to replace the clamp after taking food. The result was that, making an involuntary swallowing movement, she swallowed the sound, which was as thick as the little finger. The speaker heard nothing of the accident until a week later. The X-rays showed the sound lying along the greater curvature of the stomach. The tip had passed above the pylorus, so that it could not enter the duodenum. The tube was still in the stomach and was causing no trouble, as the patient was looking hearty and well.

She also gave him another little fright. In April a tumour appeared below the angle of the jaw on each side. He thought it was a recurrence, but later on he was satisfied that it was only that the salivary glands had become pushed down a little lower. As a precaution, however, he took a portion from one of the tumours, and sent it to the Pathological Institute for examination, where it was declared to be nothing but normal glandular tissue.

Hr. Blumenthal said that he had had a similar experience; he had sutured in the mid-line, hence the necrosis. The sutures should not be placed directly over the new œsophagus, but arranged so that the line of suture should fall on the side. Here the suture cicatrix would be better nourished than from the central line.

Gluck formed a flap from the side, a much wider one than that of Hr. Hölscher. If any tension took place, as when the line of suture lay directly over the new œsophagus, the wound must get thin and break through.

At the Aerztlicher Verein Frankfort, Hr. Raeske introduced the

SALVARSAN TREATMENT OF PROGRESSIVE PARALYSIS.

The view, he said, that progressive paralysis was a late form of syphilis and not a parasyphilitic affection, had been happily confirmed by the discovery of spirochætes by Noguchis. After this discovery it was natural that clinicians should approach the treatment of the disease with renewed hopes, and put into use the modern energetic forms of treatment. In the case of 65 paralytics, the speaker had carried out the treatment by salvarsan. In a larger number of the cases he had achieved a success that represented more than the remissions that were occasionally observed. The improvements showed themselves mostly somatically in increase in weight from 20 to 30 lbs. Ataxy, stuttering, test writing showed distinct improvement. On the other hand, the weakness of judgment was in no way improved. In like manner lost reactions such as the pupillary and patellar reflexes were never restored. The improvement did not extend over a long period. During treatment very considerable improvement was obtained in five cases, 31 showed distinct improvement, 26 remained unchanged. In two cases the disease got worse, and one died. The last three cases showed idiosyncrasy as regarded salvarsan. Salvarsan was given up to 8 grm. pro patient. After from two to three grm. had been given in a case a pause was made.

The speaker concluded that his experiences encouraged to further trials of the method of treatment.

HUNGARY.

Budapest, Aug. 30th, 1913.

GONORRHŒAL PHLEBITIS.

A case of this rare complication of gonorrhœa is reported by Dr. Veress Tozsef (*Orvosok Lapja*, August 7th, 1913), in a young man who developed a marked phlebitis in the lesser saphenous veins about four weeks after an attack of acute gonorrhœa had apparently subsided. This gradually disappeared with the use of evaporating lotions. From a study of fourteen cases thus far reported, it seems that the affection is usually present in young men during the subacute stage of a first attack of urethritis. In most of the cases an arthritis was also present. Varicose veins were seen in only one instance, so that this condition cannot be looked upon as a predisposing factor. The saphenous vein seems to be most often involved. Pain and œdema are the main symptoms, and six weeks the usual duration of the affection. Dr. Veiess believes that the affection is due to the rupture of some hitherto unrecognised focus, probably in the prostate, from which the septic material enters the venous system. The treatment is the same as that of phlebitis in other parts.

Ætiology of Prolapsus Uteri.

An interesting theory as to the causation of this condition is advanced by Dr. D. Burger (*Gynæcologia*, July, 1913). He cites the case observed by a German gynæcologist who found in a newborn child that there was complete prolapse of the vagina and uterus, degeneration and atrophy of certain groups of muscles in the lower extermities, atrophy of the pelvic floor musculature, as well as sensory paralysis of the lower limbs and the trunk as far as the upper border of the spina bifida. The author has had a similar case short of the atrophy of muscles and paralysis. He believes these cases will explain the cases of uterine prolapse occurring in women who have never borne children (about 3.5 per cent. of the cases according to Burger). In these instances the factors usually brought forward are insufficient, such as manner of living, occupation, venereal excesses, improper nourishment, inflammations and tumours. Freund attributes the condition to infantilism, others to an insufficient development of the peritoneum. In searching the literature, the author has found fourteen cases where this dislocation of the organs was already noted in the new-born child; ten of these also presented a spina bifida. He therefore set aside the supposed influence of an infantile condition or the constitution of the peritoneum, and concludes that the association of spina bifida, atrophy of the pelvic floor muscles, and genital prolapse, can be attributed to some disturbance of the sacral nerves, which results in the production of the anomalies in question. This view seems to be confirmed by instances seen in older individuals, where some injury affecting the sacral plexus is followed by not only a primary nervous disturbance, but also a secondary uterine prolapse.

On Syphilitic Aortitis.

Dr. J. Tanosi has often observed inflammatory changes in the aorta, which manifest themselves as small infiltrations around the vasa vasorum of the adventitia. This infiltration may extend to the media and may become so intense that portions of the media are destroyed completely. The ætiology of this process is very frequently syphilis, but it must not be forgotten that alcoholism and certain infectious diseases may be responsible for exactly the same lesions. Hence syphilis can never be diagnosed absolutely from the condition of the vessels, but if the granulation tissue of the media changes into connective tissue, which has a tendency to form a deep, retracting scar, which manifests itself microscopically as a puckered depression, the case is very suspicious. Even extensive inflammatory changes alone in adventitia and media will not enable a diagnosis.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

DR. EWART ON THE APEX TREATMENT FOR PULMONARY CONSUMPTION.

To the Editor of The Medical Press and Circular.

Sir,—I have read Dr. William Ewart's papers on apex treatment of pulmonary consumption that have been appearing the last few weeks in your columns with much interest, and can endorse all he says respecting the neglect of the mechanical factor in drainage of the lung when cavities invade the pulmonary tissue.

I still find that the inclined prone couch which I devised some years ago, and to which Dr. Ewart refers in his concluding article in your last issue, assists greatly in evacuating the foul secretions of chronic cases, and answers the expectations I formed of its utility. Perhaps it may be tried on a larger scale by those practitioners who are now relinquishing the treatment by tuberculin!

I am, Sir, yours truly,
Tucker Wise.

Dartmouth, Devon.
August 21st, 1913.

P.S.—Dr. Ewart mentions my name as of Montreux. I may be allowed to say that I have ceased practice there, the winter climate and the hotel accommodation not proving particularly suitable for tuberculosis.

"CROWNER'S 'QUEST" AND MEDICAL LAW.

To the Editor of The Medical Press and Circular.

Sir—It is to be hoped that the report of an inquest at Croydon, on August 26th, and published in the *Times* of the following day, will not escape the notice of the General Medical Council, and of those members of the profession who are working for medical law reform. It was proved in evidence that an unqualified and unregistered man had been practising as a medical man, and describing himself as "Dr.," for two years; that he had undertaken the treatment of a child stated to be suffering from "sickness and diarrhœa," and that the child died before the arrival of a registered practitioner, who was at last sent for. The Coroner, Dr. T. Jackson, himself, apparently, a medical man, seems to have allowed the jury to return a verdict of "Death from natural causes," without calling for a *post-mortem* examination. Any inquest in which no attempt is made to determine the cause of death is a farce. I refrain from characterising this particular inquiry and from referring to the amazing statements made by the unqualified man respecting his relations with the registered practitioner called to the case. The bald facts given are perhaps enough for the professional reader, but you may care to print the fuller report from the *Times*, which I enclose.

I am, Sir, yours truly,
H. S.

August 27th, 1913.

[We refer to the case noted by our correspondent in our editorial columns.—Ed. M.P. and C.]

IS OPERATION USELESS IN CANCER OF THE WOMB?

To the Editor of The Medical Press and Circular.

Sir,—Ought one to order an operation for a patient who has cancer of the uterus?

The whole faculty of medicine seems to thunder "Yes—at least in suitable cases" in our ears; but let us calmly examine results and see could we justify the counsel, say in a witness-box, if a clever K.C. charged us with giving unsound advice?

Many of us went to the International Congress of Medicine hoping for light on this and other subjects. In the Section of Obstetrics and Gynæcology, Professor Wertheim, of Vienna—probably the first authority in the world—mentioned his conclusions in the matter.

There came before him, it appears, 1,428 cases of cancer of the uterus. Of these, the "operability rate" was 50 per cent. 714 cases were then operated on, and five years after 186 were free from recurrence.

Do these figures justify a common, ordinary practitioner in recommending operation?

I think not. About one patient in eight is found free from the disease after five years. If these 1,428 cases were left to nature, how many would be alive after five years? Possibly not one, but probably, I submit, at least 186, for the possibility of mistaking for cancer some non-malignant form of uterine trouble is much greater than one in eight. In fact, we are taught that it is criminal to wait until the diagnosis is absolutely established—the man who insists on absolute proof of the disease is considered to jeopardise his patient's chance of life.

Most medical men hate mathematics. They ignore that celebrated canon of Rodicke of Bonn: "That in order to prove the effect of a form of treatment, the difference between treated and untreated cases must be greater than the double of the largest possible error of observation—*i.e.*, greater than the sum of the uncertainties."

I submit that the survival of one case out of eight proves less than nothing when the chances that all the original cases were not true cancer are distinctly greater than one to eight.

I am, Sir, yours truly,
J. C. McWalter, M.D., F.R.F.P. and S.
Dublin, August 26th, 1913.

THE PROFESSION AND TRADES UNIONISM.

To the Editor of The Medical Press and Circular.

Sir,—As an advocate for many years of trades unionism in the profession, I have read with peculiar interest the leader on this subject in your last issue. It is, I think, a misfortune not less for the public than the profession that the question seems for the time to be outside the range of practical politics. This result has been brought about, of course, mainly through the vote at the last annual meeting of the British Medical Association. To form a medical trades union outside that body is virtually impossible, or, at any rate, only a minority of practitioners could be found to support it. The unfortunate situation is undoubtedly to a large extent due to the odium in which the denomination trades union is held. But trades unionism is not necessarily opprobrious. It is opprobrious only when entirely egoistic in character; when it subordinates every consideration to selfish ends, disregarding entirely the advantage of the community and the welfare of the State. No medical trades union can descend to such a level so long as medical men as a mass are imbued with a modicum of true professional spirit. The profession might strengthen its organisation and increase its power by adoption of what is best in trades union methods; but it must remain in spirit always a professional union, and not a trades union in any sordid sense of the word. If we had been so organised at the time of the introduction of the Insurance Bill, we should have had command of the situation. If we were organised as thoroughly for defence as are the lawyers in their trades union, we should be able to force forward the case for medical law reform which your paper has done so much to advocate—reform so much more called for in protection of the public than of the practitioner. It is to the interest of the public and the State that medical practitioners should be truly professional men of the highest possible attainments, gentlemen of wide general education and steeped in practical knowledge of their calling. This ideal cannot be reached without adequate recognition and protection of the profession by the State; and the claim for these privileges cannot be established and advanced without great delay unless the profession be solidly organised on trades union lines. Such an organisation would further rather than hinder the promotion of scientific work, upon its devotion to which the fame of the professon must ultimately always depend.

I am, Sir, yours truly,
A Member B.M.A.
Birmingham, August 29.

A DOCTOR'S WIFE ON DRESS.

To the Editor of The Medical Press and Circular.

Sir,—Your correspondent "Gynæcologist" evidently does not know everything about women that might be useful to him and advantageous to his clients. He does not evidently appreciate the fact that the happiness of women—and happiness connotes health, as health connotes happiness—is very largely involved in the æsthetic and scientific problem of dress. Women's dress forms a capital theme for jest, but it cannot be fairly or profitably treated entirely as a joke. From the æsthetic point of view I agree with the doctor's wife who opened this correspondence. The most pressing need for our countrywomen in this connection is emancipation from the French fashionmonger. British women are the most beautiful in the world. Nowhere else can you find so large a proportion of fine figures and faces; nowhere can you find so large an average of women whose persons when unadorned are really adorned the most. This is demonstrated among the considerable proportion who now stick to the simple fundamental principles suggested in the letter of "Doctor's Wife No. 3" in your last issue. To display their beauty is a natural and entirely laudable instinct in women, and one that cannot be suppressed as a rule without injury; and as there exists no more beautiful thing in nature than the human form divine, when such beauty is chastely displayed it promotes true civilisation, and enhances the happiness of mankind. The contours and the graces of the female form can be displayed without the lewd suggestiveness that mars so much of the Parisian modes of the day, and it is within the power of British women to keep clear of such extravagancies. The present extravagancies, as some of your correspondents point out, prevent the wearing of undergarments necessary for the preservation of health in our climates; and I can testify that a very great deal of illness among women is nowadays either directly caused or seriously aggravated by the blind pursuit of fashion which engages so vast a number of women of a certain standard of intellect.

I am, Sir, yours truly,
A Lady Doctor.
London, W.,
August 21st, 1913.

OBITUARY.

DR. T. ANDERSON, YORK.

We regret to record the death from enteric fever of Dr. Tempest Anderson, M.D., D.Sc., F.R.G.S., J.P., of Stonegate, York, which took place on his voyage home from the Philippine Islands. By his decease York loses a distinguished citizen, who by his original research in one of the byways of science had achieved a world-wide reputation in scientific circles. Born at York in the year 1846, he was a member of an old York family, being the eldest son of the late Dr. William Anderson, who filled the office of Sheriff in 1854. He was educated at St. Peter's School, York, and subsequently passed to University College, London, where he had a successful career, and gave promise of the distinction in the realms of science to which he afterwards attained. After studying abroad, he joined his father in partnership on his return to York, and subsequently succeeded to the practice, specialising in ophthalmic work, but he retained his general practice till his retirement about the year 1905. He was a considerable contributor on ophthalmic topics to the medical journals, and was the author of several papers read to the British Association, and furnished to the proceedings of the Royal Society on cognate topics. During the time he was in practice Dr. Anderson held several public appointments, including those of Ophthalmic Surgeon to the York County Hospital, Medical Officer to York Castle prison, and Surgeon to the North-Eastern and Great Northern Railway Companies. He also figured prominently and held office in the York Medical Society, of which he was an ex-president, and the West Riding Medical Chirurgical Society. In scientific quarters, and by the public generally, Dr. Tempest Anderson was best known as one of the most successful amateur photographers of the day, and as a leading authority on seismographic phenomena and volcanoes. His interest in photography dated from his boyhood, but owing to the engrossing character of his medical studies he early abandoned it; resuming it, however, in the early "eighties," through the suggestion of Mr. J. J. Harris Teale, afterwards Director-

General of the Geological Survey. He was, in later years, a frequent contributor to the exhibitions of the Alpine Club, and at the *conversaziones* of various scientific societies, and also, in late years, by special invitation, in the salon of the Royal Photographic Society.

It was in the domain of volcanic geology that Dr. Anderson shone, for his systematic researches into volcanic phenomena led to his official recognition as an expert, for in 1902, when, after the eruption of the Soufrière in St. Vincent and Mont Pelée in Martinique, in May, he was appointed with Dr. J. S. Flett, another Fellow of the Geological Society, to visit the Windward Islands and prepare a report on the subject on behalf of the Royal Society. Two years later he published his principal work, "Volcanic Studies." He was widely known as a lecturer, and one year was selected as Tyndall Lecturer on Volcanoes at the Royal Institution. In descending one of the foothills of Etna in 1908 Dr. Anderson strained his thigh. He was operated on, but the accident left him slightly lame for the rest of his life. A man of genial temper, he had a large circle of friends, and though a bachelor he entertained largely at his interesting old house in one of the recesses of Stonegate, in the heart of the city, among his guests being many interesting personalities in the scientific and mountaineering world. York people were naturally proud of their distinguished citizen, and the pride was reciprocal. Dr. Anderson recalled with satisfaction that he was a freeman of the city. He did his best to conserve the city's glorious heritage of antiquarian treasures, intervening with decided effect at more than one crisis to save objects of historic interest from the vandalistic designs of civic "reformers."

REVIEWS OF BOOKS.

PLANT RESEARCHES. (*a*)

This extremely interesting volume of scientific record deals, of course, with a department of biological investigation which possesses but little significance at present for the great majority of even metropolitan consultants; and none—we might almost say less than none!—for the average panel practitioner. But we have no hesitation in announcing our belief that, in the not very distant future, this department of investigation will be found to yield copious results, and throw search-light beams into many of the still unexplored dark corners of the tantalising borderland of physics and physiology of animal and vegetable life. And it is along those planes of contact that we feel most confidence in anticipating revelations of epoch-making importance in the prevention of disease and the prolongation of life.

The author has already contributed to the extension of our knowledge of vegetable physiology a substantial volume on "Plant Response." He here laments the fact, or feature, of "the very inconvenient and tedious process of photography," which he was obliged to utilise in establishing the results of his response recorder, which was a "modification of the optical lever." His perseverance was ultimately rewarded in the overcoming of all obstacles by the device of the resonant and oscillating recorders. The somewhat creepingly human Mimosa has inevitably come in for the lion's share of attention, and every inquiring biologist will learn with interest that, although it has "been held that there was no transmission of true excitation in Mimosa, the propagated impulse being regarded as merely hydro-mechanical, the present author has been able to establish the fact that "The sensativeness of Mimosa to electrical stimulus is high, and may even exceed that of a human subject."

HUMAN PHYSIOLOGY. (*b*)

The second volume of this treatise deals with internal secretions, digestion, excretion, and the skin. The book is delightfully written. The historical aspects of physiological progress receive special attention, and at the end of each section there is a good bibliography, which has been considerably augmented by the English editor, Dr. Camis. If the book has a fault it is that there is not quite that touch of dogmatism which one rather welcomes in a text-book, and the modern aspect of certain subjects is not clearly crystallised. As an example of the latter we may take the section on the pituitary. We are simply told that certain authors find that extracts raise the blood-pressure, certain others deny it. It is surely now common knowledge that pituitary extracts do raise blood-pressure, although inert specimens are met with. Then there is no mention of the diuretic or galactogogue action of the gland. Surgeons, at the present time, will be interested in the results of experiments quoted on page 521, in which the remarkable powers of iodine in penetrating the skin are shown. The translator's part has been well done, although we question whether the word "elegant" is the best to apply to an experiment on micturition, and we are mildly shocked by "ureterorrhaphy" (362), particularly when it is used to signify closure of the urethra.

TUMOURS. (*a*)

The contemplation of the special domain of tumours conveys with it, from our present view-point, the chastening—and, let us hope, cathartic—influence of that modicum of humiliation which we have evermore been assured is so essential to the maintenance of a duly hygienic condition of the human spirit. We have every sympathy with Dr. White in the position he has assumed at the origin of his thesis: of specially stressing the physiological aspects of his subject, and asking the questions *how* (?) and *why* (?) as well as *what* (?) He has evidently been inspired by genuine truth-seeking zeal in this pursuit—and it surely is a subject, or congeries of subjects, which requires the vigorous attentions of a battalion of enthusiastic explorers in order to the completion of its cartography and physical polity. Having to examine the foundations of a new structure, our author has started at the very beginning—the only proceeding, we feel bound to add, which could secure anything of confidence in his mode of procedure and statement of results. The text is divided into thirteen chapters, of which the first deals with "Variations in Development, Growth, and Functional Activity." This title by itself implies a connotation of the author's view-point and his aim, as well as method, of investigation. Accordingly, his procedure aims, at least, at a degree of thoroughness which cannot fail to enlist the discriminating reader's sympathy, and leads to arrangement of details and enunciation of opinions which the reviewer cannot attempt to deal with in a series within the limits at his disposal. We may, however, take the opportunity of stating that the best part of Dr. White's work is the close association of physiological and pathological histology, by the combined aid of which he has so earnestly endeavoured to trace the ramifications and tendrils of the root questions associated with our very much desiderated knowledge of the "Causation of Tumours," which forms the subject of the author's twelfth chapter. We cannot dare say that he has quite reached, far less plucked out, the heart of the mystery of tumours; but this volume indicates present high-water level.

DIABETES. (*b*)

As might be expected from a physiologist, the writer, instead of distributing his attentions over the whole of the vast domain of the clinical complex known as diabetes, concentrates his powers on "those investigations that have a more or less direct bearing

---

(*a*) "Researches on Irritability of Plants." By Jagadis Chunder Bose, M.A., D.Sc., C.S.I., Professor, Presidency College, Calcutta. With illustrations. London, New York, Bombay and Calcutta: Longmans, Green and Co. 1913.

(*b*) "Human Physiology." By Professor Luigi Luciani. Translated by Francis A. Welby. In Four volumes. Pp. 558. London: Macmillan and Co. 1913. Price 18s.

(*a*) "The Pathology and Growth of Tumours." By Charles Powell White, M.D., F.R.C.S., Director, Pilkington Research Fund; Pathologist Christie Hospital, Manchester. Illustrated. London: Constable and Co., Ltd. 1913.

(*b*) "Diabetes: Its Pathological Physiology." By John J. R. Macleod, M.B., Ch.B., D.P.H., Professor of Physiology, Western Reserve University, Cleveland, U.S.A. London: Edward Arnold. 1913.

on the nature of the abnormal condition or conditions in the animal body that are the cause of the disease." There are very few pathological conditions known to us in which the clinical physiologist can display the value of his special attainments to greater advantage than in the examination of a case of diabetes, and conveying counsel regarding the treatment of its subsequent course, as well as in investigation of all available evidence regarding the original cause or groups of causes. Ever since the popularisation of Claude Bernard's epoch-making discovery of the glycogenic function of the liver, and the subsequent revelations of the complicated influences of the nervous system on the same, the subject has been one of curious symptomatic and therapeutic interest to the physician, and of correspondingly instructive experimental interest to the physiologist. And the gratifying conclusion is here enunciated by Dr. Macleod: "The physicians who have had most success with such cases are those who, by close attention to the results of experimental investigation, have a thorough knowledge of the physiological processes that become upset in the disease." But there still remains ample material for the exercise of clinical observation and experimental ingenuity; and fairly dense is the mist which still hangs over the borderland of diabetes. Even the "hormone" hypothesis, from which so much was expected at the time of its enunciation, has sadly failed to furnish forth the clinico-pathological explanation of the serial linkage of the phenomena of "pancreatic" diabetes, as it was for a time fondly hoped that it would inevitably be able to do. Dr. Macleod's welcome monograph clearly defines the line of demarcation between known and unknown, and for this we cordially thank him.

DISEASE IN CHILDREN. (a)

The opening chapter in this book on the feeding of infants and children in health is extremely good, and it is satisfactory to note that the author makes a vigorous protest against the "pap" method of feeding, and pleads for dietetics on more scientific lines. In Chapter II., two diseases related to diet—namely, scurvy and rickets, receive consideration. The author next deals with general diseases of infective origin, and in this connection we are glad to see he gives effect to the modern conception of the ætiology of chorea by including it among the rheumatic infections. After a chapter on the acute specific fevers which constitutes a new section in this edition, he discusses the diseases of the various systems. The concluding chapter on diseases of the integumentary system is also included for the first time in this edition.

For the book as a whole we have nothing but praise, and we can without hesitation recommend it as being suited to the requirements of the young practitioner.

NEW PREPARATIONS.

CITODA"—A SPECIAL SODA WATER.

We have received from Messrs. Jewsbury and Brown, Manchester, a special soda water, known as "Citoda," which is prepared with pure sodium citrate in the proportion of five grains to the half-pint, together with an equal quantity of sodium bicarbonate. The well-known property of sodium citrate in producing a very fine flocculent curd with the casein of milk in the stomach, renders it a most useful agent in the treatment of children and others who have to rely upon a milk diet. The water is pleasant to the taste, and it may be regarded, not as an ordinary mineral water, but rather as a valuable adjunct in the treatment of certain classes of medical cases in which it is desirable to maintain the alkalinity of the blood. "Citoda" is put up in syphons and retails at 6s. per dozen.

ORIENTAL TOOTH POWDER.

From the same firm comes a specimen of their Oriental Tooth Powder contained in a new hygienic "sprinkler" tin, which enables a whole family to use the same tin without any fear of contamination of the dentifrice, and, further, it is possible to use the powder up to the last grain. We have found this preparation pleasant to use. It is sufficiently alkaline and is flavoured delicately, while it cantains a sufficient amount of antiseptic to destroy the organisms of fermentation present in the mouth.

MEDICAL NEWS IN BRIEF.

Unqualified Medical Practice.

The Croydon Coroner (Dr. T. Jackson) held an inquest last week on the body of Harry Stephen Eldridge, aged eight months, of Beulah Road, West Croydon.

Harold Eldridge, the father, a grocer's assistant, said the child had sickness and diarrhœa, and he took him to "Dr." Sparling, of Northcote Road. There was a brass plate outside, "Dr. H. F. Sparling," a red lamp, and on the window was painted the hours of attendance. The witness received advice for the child and a prescription, to be made up at a chemist's, was written out. The witness received a bottle of medicine for himself, in continuation of treatment "Dr." Sparling was already giving him, and he paid 2s., believing he was paying it to a properly qualified medical man. Next morning, finding the child apparently dead, the witness went for "Dr." Sparling, who declined to come, saying he had a train to catch. He referred the witness to Dr. Morrison Orr, who attended and said that the child was dead.

Horatio Frank Sparling said he was an optician, and not a registered medical practitioner. He treated Eldridge and the baby as described, and produced the prescription.

The Coroner said it was quite a harmless one, which no medical practitioner would regard as improper for such a case.

The witness said that since the date of the baby's death the inscription on the brass plate had been altered to "H. F. Sparling." The word "surgery" was on the lamp, but over the hours of attendance there was a representation of a pair of spectacles. All "this paraphernalia" was due to the fact that a fully qualified medical man had been in practice there, who was, in fact, in partnership with the witness, though there was no written agreement. He admitted, after some hesitation, that his former partner was Dr. Morrison Orr.

The Coroner pointed out that the witness had committed a breach of the law by calling himself a doctor.

The witness replied that he had been under the impression that anybody could do that if he did not describe himself as a physician or surgeon. For two years he had been doing ophthalmic work only.

Dr. James Morrison Orr, registered medical practitioner, deposed to being called and finding the child dead from convulsions. He told the father to go to the Coroner's Officer and report the case. The witness's former partnership with Mr. Sparling was more a matter of friendship than actual partnership. The witness had the use of his surgery for his practice. Mr. Sparling was to dispense there, under supervision, and act as surgery attendant, which arrangement was with a view to his making an effort to get a qualification.

The Coroner reminded the witness that the General Medical Council had struck meny medical men from the register for having unqualified assistants.

The witness said he had had no personal or immediate connection with Mr. Sparling since he took up the optical business two years ago.

The jury returned a verdict of "Death from natural causes," expressing no further opinion.

The Coroner, addressing the last two witnesses, said that they had both sailed very near the wind. He hoped Mr. Sparling would take warning, and not carry on what was really a deception on the public.

(a) "The Treatment of Disease in Children." By G. A. Sutherland, M.D., F.R.C.P., Physician to Paddington Green Children's Hospital, etc. London: Henry Frowde and Hodder and Stoughton. 1913.

A False Insurance Claim.

At Brighton last week, William Sullivan was summoned by the Brighton and Sussex Mutual Provident Approved Society for having knowingly made a false declaration for the purpose of obtaining a sum of 10s.

Mr. Cushman, for the Society, said that since the Insurance Act came into operation there had been a great deal of malingering, and he asked that the case might be dealt with in a manner which would prevent other cases occurring.

Mr. Munday, secretary of the Society, said that the defendant declared himself "on the funds" on January 8th, having broken a leg while playing football. He became entitled to 10s. a week for six months, and during the 26 weeks four certificates were signed purporting to represent his incapacity. In June the defendant was fined 1s. for being absent from home after the hour at night set down in the rules. On July 11th the defendant's wife took to the office a declaration form signed "W. Sullivan" for continued sick benefit. He paid her 10s. On July 18th she presented another declaration signed by the defendant, but the witness declined to pay any money.

John West, road surveyor, gave evidence that the defendant worked regularly under him at Handcross from July 7th until July 16th, and from July 21st to August 1st. He worked from six to fourteen hours a day, including eight hours on July 11th. He would have to walk to the station.

Dr. Basil Jackson said he gave the defendant certificates on July 4th, 11th, and 18th, but he could not say that he saw the defendant each time.

One of the magistrates pointed out that they had direct evidence that the defendant was at work when two of the certificates were signed.

Dr. Jackson: A panel doctor has no chance when a patient is a hospital patient of doing more than I did. A patient may come to the doctor and say the hospital doctor has ordered him to lay up for a week, or twenty, and you cannot examine him because he is another doctor's patient. If you do not sign the certificate the poor, wretched patient does not get his money. What is a panel doctor to do?

The presiding magistrate, in sentencing the defendant to six weeks' imprisonment with hard labour, said: "The magistrates regret that such laxity should have occurred. We feel that this contributed to the offence, and we hope that greater care will be exercised in the future."

Re-opening of London Hospitals' Out-Patients' Departments.

After the annual cleaning and repairs, the outpatients' departments of the Royal Free Hospital, Gray's Inn Road, the New Hospital for Women, Euston Road, the Marylebone General Dispensary, and the Hospital for Diseases of the Skin, Stamford Street, were re-opened on Monday last.

Irish Medical Committee.

A meeting of the Irish Medical Committee was held in the Royal College of Surgeons, Dublin, on August 27th, at 2.30 p.m., Dr. MacNamara, of Kilmaleach, in the Chair. The following attended:—Drs. Marlay Blake, J. C. King, J. F. Fagan, B. C. Powell, J. Power, Stanley B. Coates, P. McKenna, J. S. Darling, R. W. Leslie, D. Gray, H. S. Morrison, P. J. Hamilton, T. F. Higgins, T. A. Davidson, R. J. Johnstone, E. W. Allsom, J. J. Waters, F. Fitzgerald, P. J. O'Brien, J. Ryan, J. F. Devane, R. P. McDonnell, J. Keating, H. T. Warnock, J. M. Kenny, W. F. Delany, R. J. Rowlette, Edward Thompson, R. C. Peacocke, J. J. O'Sullivan, D. Walshe, J. W. Olpherts, T. B. Costello, L. F. Rowan, Dudley Forde. Dr. M. R. J. Hayes, Medical Secretary, and Mr. C. H. Gick were also in attendance. Surgeon J. S. McArdle was also present by permission of the meeting.

A Finance and Executive Committee was appointed, consisting of the following:—Doctors Power, Darling, Warnock, McDonnell, White, Hennessy, Costello, Olpherts, and Rowlette.

Dr. MacNamara was unanimously elected as Chairman and Honorary Treasurer, also Dr. R. J. Johnstone, as Vice-Chairman, Dr. M. R. J. Hayes as Medical Secretary, and Mr. Gick as Assistant Secretary.

The following resolution was carried:—

"That every consultant should ask the medical man who calls him in if he be a medical adviser, and in case of doubt to confer with the Local Medical Secretary of the district, so that the consultant may exercise his option of refusing to meet such a man in consultation."

Dr. Power and the Medical Secretary were directed to draw up a statement of the existing situation, to be sent to the Local Secretaries for circulation amongst the medical men in each area, specially emphasising the urgent necessity for each member of the profession in Ireland sending in his contribution of £1 towards the expenses of the Irish Medical Committee in accordance with the resolutions of the delegates' meeting.

The election of the other committees and other matters of importance were left over owing to the lateness of the hour.

Fatal Overdose of Veronal.

At an adjourned inquest at Margate on August 26th, regarding the death of Mary Dorothy Brophy, aged 24, the daughter of a retired engineer living in London, the jury returned a verdict of death from an overdose of veronal. The evidence given at the opening of the inquiry was to the effect that Miss Brophy, after visiting Limerick, spent one day in London, and returned to Margate and died at Cliftonville on August 17th. She had been in the habit of taking aspirin tabloids for headache, and on a chair by her bedside there was found a box marked aspirin, and bearing the name of a Limerick chemist. The contents of the box were stated by Miss Brophy's medical attendant to have been veronal, and the suggestion was made that the chemist had made a mistake. The inquest had been adjourned for an analysis of the tabloids to be made, and Dr. Wilcox reported at the resumed inquest that the tabloids found by the bedside were aspirin tabloids. Mr. Liston, chemist, of Limerick, produced his prescription book, and showed that Miss Brophy, who was well known in Limerick, was supplied by him with twelve five-grain veronal tabloids in accordance with a prescription. Those tabloids were not supplied in the box produced. The Coroner, at the request of the jury, thanked Mr. Liston for travelling voluntarily from Limerick to Margate to give his evidence. The jury expressed the opinion that veronal should be scheduled under the Sale of Poisons Act.

The Departmental Committee on Alleged Excessive Claims for Sickness Benefit.

The names of the five medical practitioners placed upon the Departmental Committee appointed by Mr. Masterman to inquire into and report upon the alleged excessive claims upon and allowances by Approved Societies in England in respect of sickness benefit, mentioned in this column last week, are Mr. Adam Fulton, M.B., Miss M. H. Frances Ivens, M.B., Mr. James Pearse, M.D., M.O.H. of Trowbridge, Mr. Lauriston Elgie Shaw, M.D., F.R.C.P., and Mr. J. Smith Whitaker, M.R.C.S., Deputy Chairman, Insurance Commission.

Women's Medical College.

Lady Hardinge has received the sum of £70,866 towards the proposed Women's Medical College and Hospital at Delhi. The ruling Princes of Jaipur, Haidarabad, Kotah, Baroda, the Maharani of Hutwa, and the Jodhpur Durbar are the principal subscribers.

Outbreak of Typhoid near Rochester.

It is reported that typhoid fever has broken out at Chalk, a village near Gravesend, and since Thursday there have been twenty cases. The villagers obtain their supply of water from four ordinary wells, which are supposed to have become contaminated. The sanitary authorities have taken active measures to deal with the epidemic, and they have received assistance from the Joint Hospital Board of Rochester and Chatham. The patients are being removed to the rural isolation hospital.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

NATIONAL HEALTH INSURANCE COMMISSION (ENGLAND).

THE National Health Insurance Commissioners for England propose to appoint certain Medical Officers. Candidates must be registered Medical Practitioners of not less than ten years' standing, who have had experience of general practice. The salaries, pensionable, will be as follows:—£500; after three years £600; after five more years £700, and after another five years £800 per annum. Medical Officers will be required to travel and to live at headquarters approved by the Commissioners. Forms of application may be obtained from the Secretary, National Health Insurance Commission (England), Buckingham Gate, London, S.W. Letters applying for forms should be endorsed "Medical Officer" on the envelope. No application for forms will be considered if received after 22nd September, 1913.

P. R. (Bradford).—The commercial "bleaching" of flour neither increases the acidity nor the soluble extract of the flour. Experiments have shown that the process does not render flour so treated injurious either to man or to animals.

MR. F. COHEN (Shanklin).—The parasite *Nosema apis*, the cause of the "Isle of Wight" bee disease (Microsporidiosis), forms spores, and certain bees act as parasite "carriers," thereby spreading the affection. Drs. Fautham and Porter recommend going over the woodwork of infected hives with a painter's lamp before they are used for new stock.

INDECENT ADVERTISING METHODS.

M. J. T. (London, S.W.) has forwarded us a letter which his wife has received from a firm supplying accouchement sets and sanitary requisites. At the foot of the letter the following postscript is appended:—"N.B.—Notice is given us when marriages occur, but we are not always able to ascertain the home address of newly wedded parties. The Circulars, in such instances, are sent to the address from which the marriage takes place." "M. J. T." asks whether such indecent methods of advertising can be checked, and if the practice is at all common.

[Our correspondent has just cause for complaint. The practice of puffing wares of this kind is certainly objectionable, but we fear that the sending of the present letter would not be legally regarded as an offence against the Postal Acts.—ED. M. P. AND C.]

L. S. A. (Edin.).—Full particulars of the various Post-Graduate Institutions will appear in our next issue, which will be the annual Students' Number.

DR. A. G. (Somerset).)—It is possible to prepare an artificial milk from vegetables; indeed, it is said that a company is in process of formation to erect factories for the purpose of supplying this commodity which, it is claimed, contains all the elements of the best cow's milk, and can be used for the same purposes.

P. R. (Hackney).—Our correspondent is advised not to attempt excision of the growth without first trying the effects of freezing with solid carbon dioxide.

DR. LEE (Worthing).—The gentleman to whom your letter is addressed is abroad on holiday, but will return next week.

Appointments.

DROUGHT, P. J., L.R.C.P. and S.Irel., District Medical Officer of the Romford Union.

O'BRIEN, M. A., L.R.C.P. and S.Irel., Certifying Factory Surgeon for the Fermoy District, co. Cork.

O'KELLY, T., M.D.R.U.I., Certifying Factory Surgeon for the Chipping Norton District, co. Oxford.

PEYTON, THOMAS HENRY, M.A., M.D., D.P.H.(T.C.D.), Chief Tuberculosis Officer to the County Council of Cheshire.

PICKARD, MISS, M.B., B.S., Assistant to the Clinical Pathologist at the Royal Free Hospital, Gray's Inn Road, W.C. (half time).

RICHARDS, MISS, M.B., B.S., Assistant to the Clinical Pathologist at the Royal Free Hospital, Gray's Inn Road, W.C. (half time).

TEBBUTT, HAMILTON, M.B., Ch.M., D.P.H., Chief Resident Pathologist, Royal Prince Alfred Hospital, Sydney, N.S.W.

WARD, E. L., M.R.C.S., L.R.C.P., Medical Officer of the Merthyr Tydfil Union.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Harleston (Norfolk), Lisbellaw (Co. Fermanagh), Skibbereen (Co. Cork), Sunderland (Durham).

Brentford Union.—Medical Superintendent of the Infirmary and Medical Officer of the Workhouse and Schools. Salary £400 per annum, with rations, attendance, apartments, etc., together with about £80 per annum extra fees. Full particulars of W. Stephens, Union Offices, Isleworth, W.

Cumberland Infirmary, Carlisle.—Resident Medical Officer. Salary at the rate of £80 and £100 per annum respectively, with board, lodging, and washing. Applications to J. G. Howitt, Secretary.

Leicester Poor-law Infirmary.—Second Resident Assistant Medical Officer. Salary £150 per annum, with rations, furnished apartments, and washing. Applications to Herbert Mansfield, Clerk to the Guardians, Poor-law Offices, Leicester.

Monmouthshire Asylum, Abergavenny.—Junior Assistant Medical Officer. Salary £250 per annum, with board, furnished apartments, washing, and attendance. Applications to the Medical Superintendent.

Queen's Hospital for Children, Hackney Road, London, E.—Resident Medical Officer. Salary £125 per annum, with board, residence, and laundry. Further particulars of T. Glenton-Kerr, Secretary.

Somerset Hospital, Capetown.—Two Assistant Medical Officers, as House Surgeon and House Physician. Salary of each £200 per annum, with rations and quarters. Full particulars of Davis and Soper, Agents of the Somerset Hospital, Capetown, 54, St. Mary Axe, London, E.C.

Cornwall County Sanatorium.—Medical Superintendent. Salary £300, with detached furnished house. Forms to be obtained of Robert Burnet, County Medical Officer of Health, County Hall, Truro.

Warrington Union.—Assistant Resident Medical Officer. Salary £150, with apartments, rations, etc. Applications to Arthur Bottomley, Clerk, Bewsey Chambers, Warrington.

Births.

COOKE.—On August 26th at The Friary, Blakeney, Norfolk, the wife of Arthur Cooke, F.R.C.S., of Cambridge, a son.

BARKER.—On August 31st at Winstowe, St. Leonards-on-Sea, to Dr. and Mrs. E. M. Barker, a daughter.

GORDON-GREEN.—On August 29th at H.M. Dockyard, Pembroke Dock, the wife of Fleet Surgeon H.W. Gordon-Green, a daughter.

GUEST.—On August 29th at 16a John Street, Adelphi, London, to Dr. and Mrs. L. Haden Guest, a son.

KAUFMANN.—On August 26th at Mannheim, Hebelstrasse 21, the wife of Dr. Victor Kaufmann (Leonie Marx), a daughter.

KENNEDY.—On August 27th at The Mount, Market Harboro', to Eileen, the wife of Major J. Crawford Kennedy, R.A.M.C., a daughter.

LOEW.—On August 27th at 281 Woodstock Road, Oxford, the wife of Dr. E. A. Loew, a daughter.

MORGAN.—On August 31st at 18 Cornwallis Gardens, Hastings, the wife of Conway Morgan, M.D., a daughter.

OGILVY.—On August 29th at Long Grove House, Epsom, the wife of David Ogilvy, M.D., a son.

STEWART.—On August 28th at 53 Wood Street, Barnet, Herts., the wife of Bernard H. Stewart, M.A., M.D. (Cantab.), a daughter.

GRUNBAUM.—On August 25th at St. Helens, Adel, to Dr. and Mrs. Grünbaum, a son.

Marriages.

KNOX—VANCE.—On August 23rd., at Rosslyn Hill Chapel, Hampstead, Robert Knox, M.D., of 7 Harley Street, London, to Alice Vance, M.B., third daughter of the Rev. G. H. Vance, B.D., of Highgate.

THWAITES—JEFFERIES.—On August 27th at Christ Church, Heaton, Bolton, Joseph, eldest son of the late Mr. and Mrs. Edward Thwaites, of "Highfield," to Leila Etheridge, only daughter of Dr. and Mrs. Horace Jefferies, of "Welsby," Bolton.

Deaths.

ALLEN.—On August 13th at Pietermaritzburg, Natal, James F. Allen, M.D., fourth son of the late William Allen, Esquire, of Liscongil, County Cork, Ireland.

ANDERSON.—On August 26th on board ship, near Suez, of typhoid fever, Tempest Anderson, M.D., D.Sc., etc., of Stonegate, York, aged 66.

CLARK.—On August 29th at 9 Trinity Crescent, Folkestone, Andrew Clark, F.R.C.S., Colonel A.M.S.T., of Cowley Grove, Uxbridge, aged 66.

HILSTON.—On August 28th in Edinburgh, Sir Duncan Hilston, K.C.B., M.D., of Chewton Lodge, Christchurch, Hampshire.

LUNT.—On August 26th at Pontypool Hospital, George Osborne Morgan Lunt, B.M., M.C.

MORRIS.—On August 31st suddenly, at Gordon Lodge, Blackheath, Clarke Kelly Morris, J.P., M.R.C.S., L.S.A., of heart failure, aged 58.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, SEPTEMBER 10, 1913. NO. 11.

NOTES AND COMMENTS.

Medical Books. ONE of the first things a student does as soon as he has chosen his medical school is to lay in a stock of books. If he be wise he will obtain some practical advice in this matter from a medical friend or a senior student who has been through the mill before he rushes into the nearest medical bookseller's and comes out the poorer by a five-pound note. Only those books that are actually needed by him at the time of entry should be purchased at first. To buy an expensive system of surgery before his third or fourth year is a needless piece of extravagance, for a good manual of anatomy, practical and theoretical, a sound text-book of chemistry, and a standard work on physiology or biology, will be all that is necessary for several months to come. By degrees he will add to his stock, and only the true bibliophile knows the pleasure of watching his medical library expand as, year by year, the volumes are added according to their owner's special needs. After qualification some of these may, doubtless, be wanted no more, and a few may become obsolete, but there is always an unwillingness to part with the old and trusted friends, with their bethumbed pages that have done such splendid service in one's student days. But the medical practitioner always remains a student, and as such he still requires books, monographs, systems and treatises, perhaps in several languages, with which he can refresh his memory in dealing with some difficult case. It is false economy to deny one's self good books.

The Value of the Medical Museum. VERY early in his career the student will make the acquaintance of the various museums attached to his medical school. At first these places are visited from a spirit of morbid curiosity, and gruesome accounts of the specimens seen are retailed around the fireside to an awe-struck family circle. A little later he finds that it is to his advantage to sit quiet upon a hard stool and study a "pickle" with the aid of his text-book, or examine the markings upon a bone in the department of normal anatomy. Meanwhile his visits to the pathological section of the museum grow less and less frequent until the end of his career, when he is "taken round" by his medical or surgical tutor and encouraged to diagnose the conditions seen in the preserved specimens which seem to look so different from what he has observed upon the *post-mortem* room table. The latter he could succeed in "spotting" for the most part, but when isolated from their surroundings and transfixed with glass rods of many colours, somehow his diagnostic powers seem to have vanished. Nevertheless, the pathological museum is an institution of real educational value, and many a man engaged in busy practice has ample opportunities for securing good specimens of tumours, malformations, calculi, or what not, which the curator of his hospital museum, or even that of the Royal College of Surgeons, may be only too glad to receive.

Hospital Appointments. THE success or otherwise of the student's career is commonly measured, not by the number of prizes and medals won at examinations, but by his holding of an appointment upon the junior resident staff of his own hospital. Has he been fortunate enough to obtain the position of House Physician or House Surgeon? Then his position is more or less secured, for although most house appointments are unpaid, the *kudos* that attaches to their holder marks him out as a man likely to "get on" to the hospital staff should he hang about doing demonstratorships, etc. In the smaller general hospitals in the Metropolis without medical schools, and also in the provincial hospitals, house surgeons and resident medical officers are paid officers, though the tenure of office of these posts seldom exceeds one year. These appointments are of priceless value to their holder, for no small responsibility attaches thereto, inasmuch as a house officer is brought into intimate relationship with the public, in the casualty and out-patients' departments, as well as in the wards. At the present time there is said to be a dearth of candidates for these posts in many quarters. In some cases this falling off of suitable men may be due to the eagerness of newly qualified men to embark upon general practice for themselves. It cannot be too strongly impressed upon the neophyte that, from the point of view of gaining invaluable experience in the treatment of all manner of diseases and injuries, it is worth his while to take up one such post for at least six months before deciding upon any future sphere of work.

The Fortunes of the Small Hospitals. THE financial pathway of the smaller voluntary charities, as a rule, is not strewn with a prodigal wealth of roses—often their story is one of perennial struggle in the face of difficulties that would be regarded as hopeless in any ordinary human endeavour. As a matter of fact, they have to depend on benevolence that is fitful, and inclined in many cases to bestow its favours upon the clamorous and insistent, rather than upon the modest and retiring. During the past generation an attempt has been made to evolve some sort of order out of the chaos of the medical charities, with the result that the bulk of the money available is now collected by certain responsible agencies or Funds scattered throughout the Kingdom. These agencies, excellent as they undoubtedly are in intention, have added grievously to the difficulties of the smaller hospitals. In most of them the responsibility of distribution goes hand in hand with that of collection. Their executive is made up almost exclusively of individuals who are interested, directly or indirectly, in the large institutions, with the inevitable result that grants to small institutions either become reduced to slender proportions or altogether disappear. The only exception, as was proved with chapter and verse in these columns some years ago, is when the chairman of a special hospital happens to have a seat on the management of a distributing fund. It has, in a word, been evident for many years that the deliberate policy of the Funds has been gradually to extinguish the small hospitals.

The Policy of the Hospital Funds.

THIS curious result was certainly not anticipated by the originators of the Funds. In one particular instance, at any rate, a great Metropolitan Fund was instituted by the then chairman of a special institution. Why should not the small hospitals be represented on the committees of the Hospital Funds in all parts of the Kingdom? The justice of such a course needs little supporting argument. The smaller institutions were the precursors of the special departments in the large general hospitals. In the special hospitals of the United Kingdom at the present moment unrivalled scientific work is being carried on day by day. It is indeed difficult to appreciate at anything like its true value the indebtedness of medical progress to specialism as carried on on present lines. Under these circumstances it will be little short of a public calamity if the arbitrary policy of the Funds be permitted seriously to damage the prospects of the special hospitals. It is difficult to believe that His Majesty King George—whose sympathies are wide, as his judgment is usually sound, in public affairs—can be fully informed as to the facts of the distribution of the great Fund over which he presides. Were he to insist on a proper representation of the small hospitals upon the executive of the King Edward Fund, a great deal of the present inequality and injustice would drop out of existence.

"Alexandra Rose Day."

NOT the least part of an abuse of the kind is that, once perpetrated, it is likely to be adopted as a precedent by succeeding distribution agencies. Such an one, indeed, has sprung up in the shape of the Queen Alexandra Fund, an exceedingly graceful and popular organisation, the object of which is to collect money for the London Hospitals. The collection is made practically in the streets, and is to a large extent derived from pennies contributed by poor and middle-class persons—that is to say, by those who find an untold amount of succour and relief from the special hospitals. Yet even this new comer excludes from the grants all but a few of the small hospitals—regardless of the unblemished reputation, the long-continued labours, or the whole-hearted philanthropy that characterises the majority of such institutions. It may be at once stated that the omission of the small hospitals is no part of Queen Alexandra's policy, but rather that of an irresponsible self-elected committee, who apparently have not thought it necessary to ascertain Her Majesty's views upon the subject of distribution. If the Fund which bears a name so honoured in the annals of British philanthropy is to secure general approbation, it must be administered by a properly appointed committee, containing amongst its members a fair proportion of representatives of the small hospitals.

Panel Dentists.

A SUBJECT of great national interest was discussed the other day at the Annual Congress of the Incorporated Dental Society—namely, the advisability of adding a dental panel to the existing machinery of the National Insurance Act. Considering the supreme importance of good dentition to health, it is somewhat surprising that dental benefits were not included from the first. Modern bacteriology has shown that decayed teeth act as channels, as well as foci, of infection, and it is at least probable that the virus of many specific diseases may obtain an entrance into the system through such portals. It is far easier to prevent than to cure, and many a case of anæmia and incipient phthisis, not to mention pronounced dyspepsia, might be remedied in the earliest stages by timely attention to the teeth. If the funds were insufficient to provide for free dentistry for panel patients at the time of the passing of the Act, a further sum might be voted by the Government for this express purpose. It is understood that the Chancellor of the Exchequer is deeply interested in the proposal, and that it has the support of a number of eminent dental surgeons throughout the country.

The Tuberculosis Officer.

A NEW field of activity has been opened up for medical men since the passing of the National Insurance Act in connection with the administration of sanatorium benefit. The demand for tuberculosis medical officers throughout the country has created a new type of medical official, for there are already large numbers of tuberculosis officers—or, more simply, "T.O.'s"—already in the field doing splendid work in the national struggle against consumption. The work is interesting and engrossing, calling forth powers of organisation and of diagnosis. In the latter respect it is of the utmost importance that candidates for these posts should have held some appointment at one or other of the large chest hospitals, for he will have the responsible duty of deciding in doubtful cases whether a patient be suffering from tuberculosis at all and what form of treatment should be prescribed. The principal duty of the T.O. is to act as medical adviser to the local Insurance Committees in connection with the working of sanatorium benefit, and also to take charge of the work of the tuberculosis dispensaries. The dispensary is really the main unit of the Departmental Committee's scheme, and may be regarded as the clearing house for all cases of tuberculosis. The work at present demands the officer's whole time.

On Reading Character.

FEW men have such unrivalled opportunities for the study of their fellow-men as the medical practitioner. If he be something of a character reader he can daily exercise the art and test the principles of Gall and Spurzheim for himself. Indeed, the would-be medical anthropomorphologist or phrenologist will instinctively take stock of his patient during an interview and mentally label him in his proper class. The physical and mental traits of the different types of character can be appraised, at any rate with an approximate degree of certainty, in the course of a few minutes' conversation by the student who has learned to interpret such signs aright. In this sense the medical man needs to cultivate those powers of observation made use of by the detective who seizes upon small, yet unfailing, indications to guide him in forming an opinion upon a case. That certain popular errors in reading faces need to be dispelled is evident after the perusal of a recent Government Bluebook on "The English Convict," which contains the results of a remarkable statistical investigation by Dr. Charles Goring, Medical Officer of Parkhurst Prison, based upon measurements of prisoners. According to these observations, there is no such thing as the criminal type of face, for in head measurement the criminal "does not differ perceptibly from Oxford or Cambridge undergraduates." Not very flattering to young University bloods! Neither does a high forehead always signify great intelligence, nor a retreating frontal region a cunning criminality. This being the case, the medical practitioner will have to be more wary in future in forming an estimate of his patient's character.

"Should the Doctor Tell?"

The echo of an old newspaper correspondence is revived once more in a story which comes from Nottingham of an inquest upon a female suicide, for in the account of the evidence thereat a medical man is alleged to have informed the deceased that she "would never be the same again" owing to the state of her heart. A witness remarked that he could not "understand a doctor saying such a thing in the presence of a patient," as he might be sure it would cause depression. It certainly requires a good deal of tact to know when to reveal the actual diagnosis to a patient, and if the latter be at all nervously inclined it is probably the wiser course not to tell him immediately that he is suffering from a mortal disease. No harm can result from a postponement of the death sentence, as it were, by the medical man, unless the patient be specially anxious to "know the worst." A guarded prognosis in the great majority of cases is the safest course to pursue, for what practitioner is there who has not experienced the surprise of having his verdict happily reversed and of seeing his patient, after having one foot in the grave, live to enjoy many years of life? Many neurotic patients and those of a worrying disposition are invariably made worse by being told that they have such and such a malady, and much diplomacy and even "hedging" will have to be legitimately resorted to to satisfy their insistent demands for information which would only do them harm. The true state of affairs can generally be confided to a relative or friend if necessary, but the patient, especially a heart case, should always be spared the shock of knowing his real condition, if that be a grave one.

Neology in Medicine.

There is no sign of any diminution in the manufacture of fresh medical terms, as a reference to any good medical dictionary will show. Medical nomenclature has always provided a source of high amusement to the general public, who delight to talk about the wonderful crackjaw names the doctors give to their diseases. To the classic scholar, however, such terms are mostly self-explanatory, and their length, though seldom attaining the linear dimensions so commonly met with in German scientific literature, is quite commensurate with the lengthy phrase which they so aptly substitute. It would be an interesting study to estimate the length of life enjoyed by a newly coined medical term, for even such scholarly inventions as those of Coleridge and Sir Thomas Browne seem born only to die. Words descriptive of surgical operations are certainly comparatively short-lived, for operative procedure changes with the growth of knowledge. It is as true now as in the time of Ben Jonson that "a man coins not a new word without some peril, and less fruit; for if it happen to be received, the praise is but moderate; if refused, the scorn is assured." What responsibility, therefore, rests upon the medical neologist, for of medical word-making (and word-taking) there is, indeed, no end. At the present rate of multiplication one hardly dare speculate as to the amount of shelving-room that will be needed for the medical dictionary of the future.

PERSONAL.

Dr. W. H. Nutt, Ch.B.Edin., has been appointed Honorary Radiographer to the Chesterfield and North Derbyshire Hospital.

Dr. F. Howard Humphris has been elected President of the Brussels Medical Graduates' Association for the ensuing year.

Dr. W. R. W. Asplen, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., has been appointed Deputy Coroner for Central Warwickshire.

Dr. Douglas Edward Finlay, M.B., B.S.Lond., has been appointed a Physician to the Gloucestershire Royal Infirmary and Eye Institution.

Dr. Andrew Leslie Dykes, M.D.Edin., lately of Plaistow Fever Hospital, has been appointed Assistant Medical Officer of Health for Oldham.

Mr George Finch, M.R.C.S., L.R.C.P., of West House, Southover, Lewes, formerly Assistant School Medical Officer to the East Sussex County Council, has been appointed Assistant Tuberculosis and School Medical Officer to the East Suffolk County Council.

Dr. John Evans, of Swansea, surgeon, one of the leading members of the Executive of the Swansea Liberal Association, and formerly a member of the Old Swansea School Board, who died on January 3rd last, aged 69 years, left estate of the gross value of £3,309 0s. 7d., with net personalty £546 3s. 6d.

A stained-glass window was unveiled at the ancient church of St. Martin, Ashton-upon-Mersey, on Sunday last, to the memory of Jeremiah Renshaw, surgeon, who practised in Ashton-upon-Mersey and Altrincham from 1831 to 1862. Mr. Renshaw was one of the early members of the British Medical Association, in the time of its founder, Sir Charles Hastings. The window has been erected by his son, Dr. Charles J. Renshaw.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Reginald O. Moon, M.D.Oxon, F.R.C.P.Lond., Assistant Physician Dreadnought Hospital for Women; Physician Hospital for Diseases of the Heart, London, W., etc., etc. Subject: "Functional Diseases of the Heart."*

EDUCATIONAL SUMMARY FOR 1913-14.

INTRODUCTORY REMARKS.

In a "Students' Number" it is usual to commence with a brief, informal address to those who are about to commence their studies in one of the most complex as it is the most progressive and—we are happy to believe—the most noble and humane of all professions. The necessity of a wide general culture for all who aspire to its membership is registered in the scope of the preliminary examination. For those who aspire to its highest honours it is necessary to possess a knowledge of many things outside the formal limits of the art and science of medicine, and above all to acquire an intimate acquaintance with men and manners. Happily, this does not mean that the aspirant must needs have a University training, for some of the men whose names are household words in the profession have not enjoyed that advantage, while others have started from the lower steps of the social ladder. The prizes of the profession, in fact, are open to all comers who can bring sound brains and determination of purpose to their task, assuming, of course, that they are able to obtain an adequate preliminary education and the funds necessary to meet the expenses of medical curriculum and qualification. Of late years the tendency has been to include in the preliminary examination subjects that would be of direct use to the student in his later career in the schools. It would be difficult to imagine a better training for a young man than that required in mastering the elements, say, of botany, zoology, and chemistry. At the outset of our remarks it has seemed natural to dwell upon the intellectual side of the career of medicine, for in that will be found a solace for the trials and difficulties that must be faced in that as in all other walks of life. From the monetary point of view it is open to any man of ordinary gifts and application to secure a competency, although he may have at first to go through a more or less extended period of years spent in the weary task of waiting for practice. It is well to point out that under present conditions few may hope for the prizes that are met with in general, in consulting, in special, and, in some cases, in the army, navy, and civil services.

The average medical man is content to live a plain, hard-working career, of which the material reward will be a modest competency and the higher moral assurance that his years have been well spent in the service of his fellow creatures. He may at once dismiss all dreams of fame, title and fortune, for these are given to the few. In some ways, however, his path as a private practitioner is likely to lead through more roseate pastures than those to which he has hitherto grown accustomed by long usage. Of late years the State has taken upon itself more and more responsibility as regards the health of the citizen. In this way new services have been created and old services augmented with the view of extending to the poorer classes the advantages of modern preventive and curative medical science. Such, for instance, is the school medical service and the greatly increased and partly specialised Poor-law medical service. Last, but not least, comes the much-vexed National Insurance Act, which provides a comprehensive scheme for the provision of medical attendance to the labouring classes on a scale hitherto undreamed of. In spite of the mixed feelings with which this Act has been accepted by the medical profession, it has come to stay. It may be said broadly that, although in some cases Mr. Lloyd George's Act has inflicted great hardships upon individual medical men, it has on the other hand greatly augmented the gross income previously derived by medical men from the insured classes. In future the panel appointment will count for a good deal with the medical man whose field of labour lies partially or wholly among the poor. In any case, a State appointment of the kind, however irksome and laborious, must rank immeasurably higher than the open dispensary practice with its degrading circumstances. It is indeed deplorable to find a member of a learned and honourable profession offering physic and advice for sixpence, or even threepence a consultation. In the course of time, however, we may hope that the conditions of which this kind of undesirable medical practice is the outcome may be removed, and that there will be no need for any qualified man to adopt such discreditable methods.

From the first day that he commences his medical studies the student will do well to keep steadily in view the necessity for keeping abreast of new ideas. The present age is one of thinkers, and it is filled with fresh ideas in all branches of intellectual activity with an exuberance that has never been equalled at any previous period of human history. Above all is this true in medicine. The student of a generation ago finds himself surrounded with a host of new methods, remedies and appliances, the very jargon of which demands for its interpretation the brains of a general specialist. To-day the private practitioner must have a knowledge of vaccines, of many laboratory methods of diagnosis, and of a long list of technical processes, or, at any rate, of their principles and their practical application, as, for instance, in the case of the Wassermann test for syphilis and the treatment of that malady by Ehrlich's famous "606."

In all classes of practice the need of the pathologist is everywhere more apparent. So great, indeed, has become the necessity that we were lately informed on good authority that a famous German physician had a full clinical examination made of each patient before the latter entered his consulting room. The student, bearing this in mind, will do well to pay careful attention to the acquirement of a working knowledge of the main methods of the clinical and pathological laboratory. At the same time it can hardly be too strongly impressed upon him that it is necessary to cultivate the habit of close bedside observation of his patient. It is impossible to replace by the test tube and the microscope that carefully trained faculty which has been aptly described as the "clinical sense," the presence or absence of which not infrequently determines the success or failure of the medical man in his professional career. It should be remembered that the conditions of actual practice differ widely from those met with by the student in a well-appointed hospital. In dealing with private patients the practitioner is thrown upon his own resources, and may have to meet serious casualties and emergencies with the slenderest of surgical and medical resources. An extreme instance of the kind is when a medical man is called upon to treat a foreigner *in extremis* unprovided with a stethoscope or other ordinary professional appliances, and unable to communicate directly or indirectly by word of mouth with the patient or his friends. Under such circumstances the diagnostic faculties of the medical observer are put to a crucial test. An instance that sometimes happens in private practice at home is when a medical man is called by the police to an unconscious patient. An error in the diagnosis of alcoholism or other narcotic poisoning, fractured base of skull, concussion, diabetic coma, apoplexy, and so on, may destroy the patient's chance of recovery and have a disastrous effect upon the reputation of the medical attendant. Any man who has carefully trained his clinical senses will lessen proportionately the chances of error in this admittedly difficult branch of diagnosis.

From an early period of his studies, the student will do well to devote some attention to the wider aspects of professional work, for the real business of his life begins after the days of his probation. There are many ways in which the position of the medical practitioner might be greatly improved. Nor is it going too far to say that most of them would be attainable were a proper representative body created to protect the interests of the profession. One of the early questions that the student would do well to bear in mind is the relation the General Medical Council and the Medical Corporation he has joined will have towards his future career. Will they leave him in absolute neglect from the day of his final qualification, or will they do anything to help him on in the professional struggle? For some reason or other the profession is in the unstable position allotted in sacred writ to the house divided against itself. Instead of a single-portal entrance to the profession, as in law, we have a score or more of conflicting corporations. Indeed, the spirit of rivalry, and of individual as apart from collective action, seems to be so deeply rooted as to render the outlook for future consolidation somewhat discouraging. Yet the signs of the times do not point all in one direction. The British Medical Association, in spite of various defects and errors, has shown that great things are possible to a great profession with a common object in view. The success of many other purely professional organisations, moreover, points the moral of the tale sufficiently well to show that the road to professional paradise lies through the gate of co-operative union. Lastly, there is the recent opposition to the National Insurance Bill.

Choice of a School.

Many things are concerned in the choice of a school. Tradition, family influence, proximity, means, and acquaintance with other students or members of the staff all come into play, and there are few who are not affected by them. The would-be student, however, who has the whole collegiate domain open to him and his selection unhampered by other consideration than that of merit, has the choice of nearly twenty centres in which to follow his bent. There is a natural tendency for a man to look to his immediate vicinity for the maturing of his genius, and in these days, when Universities are cropping up with bewildering frequency, most students will probably find one within fifty or sixty miles of their homes. As the medical curriculum is laid down carefully by the General Medical Council, there is not much variation in that of the individual schools, and a good all-round education can be relied on in practically every one. On the one hand, some have teachers of established ability and reputation, whilst others are seeking to obtain that enviable notoriety, and while some men may be attracted by the spirit of adventure to cast in their lot with the new and struggling, others will prefer the security of well-trodden paths. The object of this number of The Medical Press and Circular is to present impartially the claims and attractions of all schools, and if parents and their wards study its pages carefully they will, we feel sure, be convinced that there are none that have not their own special charms. The outlay on actual necessary educational expenses does not differ materially in different places, the higher cost of certain centres being chiefly due to the greater cost of living. It is obvious that in London, for instance, where rents are high, the cost of lodgings must be considerably more than in many smaller and less favourite towns, while, on the contrary, a student living in his parents' home in London will not be so much expense to them if he goes to a London Hospital as if he takes up his abode at a northern University. But, other things being equal, it is important for the average student to choose that school at which he is most likely in after years to obtain a resident post.

Choice of a Qualification.

One day, in the not very distant future, we hope, the choice of what qualification to study for will not present so great a difficulty as it does to-day. Owing to the haphazard way in which British institutions and customs grow up, there have come into being a number of rival interests, both pecuniary and scholastic, which it is difficult to break down, with the result that students are offered all sorts of qualifying diplomas, conferring on them the right to append almost every conceivable alphabetical combination to their names. It may be laid down in general terms that the shortest and least picturesque of these designations will generally be found the most serviceable, both from the expenditure of time that it will save in signing certificates, and in the greatest ease by which it will be understanded of the people. Happily, or unhappily, a qualification even of the highest order has, as a rule, but small relation to success in practice, and many practitioners of light and leading will be found to have laid the foundations of their success on a more solid basis than that of academical triumph.

Course of Study.

Although there are certain individual variations, the course of study pursued at all the medical schools is pretty much the same. One or two of the Universities are a little exacting in the number of special subjects they pile on to the crouching backs of their alumni, but in course of time it is generally found that the other centres of instruction follow their lead. Still, it is well to remember that from the moment the student pays his fee to the dean, the disposition of each moment of his time for the next five years is laid down with procrustean exactness, and that any diversion in the shape of amusement, illness, or failure in examination connotes a corresponding addition to the length of his pupilage.

Medicine, then, it should never be forgotten, is the means to an end, and that end is the amelioration of man's lot on earth, and not the aggregation of wealth. As the first it is a brilliant success; as the latter it is a sorry business. It is a career which should be chosen only after due deliberation, and by those alone who are prepared to accept whatever fate may betide them with cheerfulness and courage, secure in the faith that is begotten of high ideals and of a sense of duty manfully discharged.

THE ENGLISH UNIVERSITIES.

The English Universities, including Wales, are ten in number—viz., Oxford Cambridge, London, Manchester, Durham, Liverpool, Leeds, Sheffield, Birmingham, Bristol, and the University of Wales. The choice of a University is usually determined by social, geographical, and financial considerations. Students whose parents are able and willing to incur the necessary expense will do well to select one of the ancient Universities, since their degrees confer upon their holders a status not accorded by the public to the degrees of more modern institutions. To those less favoured by fortune, but blessed with energy and a fair share of intelligence, the London University offers ample scope, and its degrees are recognised as the outward and visible sign of high professional attainments. A capable and industrious student, however, may equally well lay the foundations of success in one of the newer provincial Universities.

UNIVERSITY OF OXFORD.

There are two degrees in Medicine, B.M. and D.M., two in Surgery, B.Ch. and M.Ch., and two diplomas, Public Health and Ophthalmology.

Graduates in Arts (B.A. or M.A.) are alone eligible, except for the Diploma Examinations. To obtain the B.M. and B.Ch. the following examinations must be passed:—1. Preliminary Mechanics and Physics, Chemistry, Animal Morphology, and Botany. 2. Professional. *(a)* First Examination: (1) Organic Chemistry, (2) Human Anatomy. *(b)* Second Examination: Subjects—(1) Medicine, Surgery, Midwifery, (2) Pathology, (3) Forensic Medicine with Hygiene and (4) Materia Medica with Pharmacy.

The First Examination for B.M. and B.Ch. may be passed as soon as the Preliminary Scientific Examinations have been completed. The subjects may be presented separately or in any combination or in any order, provided Anatomy and Physiology be passed together.

The Second Examination may be passed after the completion of the first, but Pathology and Hygiene may be taken before or with the remaining subjects. Before admission candidates must present certificates of attendance on a laboratory course in Practical Pathology and Bacteriology and of having acted post-mortem clerk for three months, surgical dresser for six months, and clinical clerk for six months. Also they must produce certificates of instruction in Infectious and Mental Diseases, and of attendance on Labours, and of proficiency in the practice of Vaccination and the administration of Anæsthetics. Also in respect of the First Examination candidates must present certificates showing that they have dissected the whole body once and have attended courses of laboratory instruction in Practical Histology and Practical Physiology.

The degree of D.M. is granted to Bachelors of Medicine of the University provided they have entered their thirty-ninth term and have composed on some medical subject a dissertation which is approved by the professors in the Faculty of Medicine and examiners whose subject is dealt with. A book published within two years of the candidate's application for the degree may be substituted for a dissertation. The degree of M.Ch. is granted to Bachelors of Surgery of the University who have entered their twenty-seventh term.

Diploma in Ophthalmology.—There is an examination once in each year in the Theory and Practice of Ophthalmology for the purpose of granting certificates of proficiency therein, styled Diplomas in Ophthalmology. The examination is under the supervision of the Board of the Faculty of Medicine, which has power to make regulations as to the subjects of the examination, the time at which the examination is held, and the conditions of admission. No candidate is admitted to the examination for the diploma who has not pursued at Oxford a course of study in Ophthalmology approved by the Board of the Faculty of Medicine, and extended over a period of at least two months.

Travelling Fellowship, Scholarships, and Prizes.—A Radcliffe Travelling Fellowship is awarded annually after an examination held in February. It is tenable for three years and is of the annual value of £200. Application should be made to the Radcliffe Examiners, Radcliffe Library, University Museum. A Rolleston Memorial Prize is awarded once in two years to members of the Universities of Oxford and Cambridge of not more than ten years' standing and who have passed all the Exams. for the degree of B.M. or B.A. for an original research in some Biological subject, including Physiology or Pathology. The Radcliffe Prize, founded by University College (1907), is of the value of £50 and is awarded biennially for research in some branch of medical science. The Theodore Williams Scholarships of the value of £50 each are awarded annually in the subjects of Anatomy, Physiology and Pathology.

Detailed information may be obtained from the University Calendar.

UNIVERSITY OF CAMBRIDGE.

At the University of Cambridge five years of medical study are required for the M.B. and B.C. degrees. The candidate must have resided nine terms (three years) in the University, and have passed the "previous" examination in classics and mathematics. There are three examinations: The first in (1) chemistry, (2) physics, and (3) biology; the second in (1) human anatomy and physiology, and (2) elementary pharmacology including pharmaceutical chemistry and the elements of general pathology; and the third in (1) surgery and midwifery, and (2) principles and practice of physics, pathology and pharmacology. The first examination is divided into three parts, and the second and third examinations each into two parts, which can be taken separately. Subsequently to the third examination an Act has to be kept which consists in reading an original thesis, followed by an oral examination on the subject of the thesis. As the subjects for the examination for the degree in surgery are included in the third examination for the M.B. degree, candidates are admitted to the degree of Bachelor of Surgery on passing the third examination for Bachelor of Medicine.

The M.D. degree may be taken three years after the M.B. An 'Act must be kept, including the presentation of an original thesis, with oral examinations and an essay to be written extempore. There is also the degree of Master of Surgery, for which the candidate, having already passed for B.C., or being M.A. has otherwise qualified in surgery, has to pursue extra study in surgery, and has a special examination or submits original contributions of merit to the science or art of surgery. The yearly expenditure of a student who keeps his terms by a residence in a college is from £150 to £200 a year. This, however, may include all payments to the University and the College—all fees as well as clothes, pocket money, travelling expenses, &c. Non-collegiate students have to pay the University fees only, which are not large. They lodge and board in the town; their expenses, therefore, are largely in their own hands. Various studentships, scholarships and prizes are open to medical students.

The University grants a diploma in public health without the necessity of residence, the examination being in so much of State Medicine as is comprised in the functions of officers of health, and subject to the latest requirements of the General Medical Council. These examinations are held in Cambridge the first week in April and October. Candidates, whose names must be on the "Medical Register" of the United Kingdom, and need not be members of the University, should send in their applications to the Secretary of the State Medicine Syndicate a fortnight in advance. Every candidate who has passed both parts of the examination to the satisfaction of the examiners will receive a University Diploma testifying to his competent knowledge of the subjects comprised in the duties of a medical officer of health.

There is also a special examination in Tropical Medicine and Hygiene, held annually twice—in January and in August. It is open to qualified practitioners under certain conditions as to previous study and experience. Successful candidates receive a University Diploma.

An abstract of all Regulations may be obtained upon sending a stamped directed envelope to the Assistant Registrary, Cambridge. Full information is contained in the University Calendar.

UNIVERSITY OF LONDON.

The University of London became in 1900 a teaching as well as an examining body. The medical degrees awarded are those of M.D., M.S., and M.B., B.S., the two latter being now given together as a graduating degree. The medical degrees are granted to both internal and external students, the former being students of the constituent schools and colleges of the University.

The Matriculation Examination.—Students, before being admitted to the University, must either (1) have passed the Matriculation or the School Examination, or (2) have been exempted therefrom under Statute 116 of the University which recognises certain other examinations in its lieu. The examinations for matriculation take place three times in each year—in September, in January, and in June. Fee £2. If he withdraws before the last day of entry it will be returned to him. If he fails to present himself he will be allowed to enter for a subsequent Matriculation, within eight months, on payment of £1. If he retires after the commencement of the examination, or fails to pass it, the full fee of £2 is payable on every re-entry.

Provincial Examinations for Matriculation.—These are appointed by the Senate upon the application of any city, institution, or college desiring to be named as a local centre, and are carried on simultaneously with the examinations in London. Candidates must give notice upon their forms of entry to the Principal of the University, who will then make all necessary arrangements. Besides the University fee, a fee, usually varying from £1 to £3, is charged by the local authorities, and must be paid at the local centre immediately before the several examinations.

Faculty of Medicine.—The Faculty of Medicine grants the joint degrees of M.B., B.S. (Bachelor of Medicine and Surgery), and the higher separate degrees of M.D. (Doctor of Medicine) and M.S. (Master of Surgery). The curriculum for the medical degrees covers five and a half years, except in the case of students who have passed the Preliminary Scientific Examination or the First Examination for Medical Degrees, before July, 1910, and the examinations formerly known as the Preliminary Scientific, the Intermediate, and the Final Examination in Medicine are now respectively entitled the First, Second, and Third Examinations for Medical Degrees.

The First Examination for Medical Degrees (Inorganic Chemistry, Physics, and General Biology) takes place twice in each year, commencing on the Monday following December 10th, and on the second Monday in July. The fee is £5 for each entry to the whole examination, provided that all the subjects are taken at one time. When less than the whole examination is taken at one time, it is £2 for each subject.

The Second Examination for Medical Degrees (Part I.): Organic Chemistry.—This examination takes place twice in each year. No candidate will be admitted to this examination within six months of having passed the First Examination. The fee is £2 for the first and every subsequent entry. The examination will consist of a paper and practical work, and may include oral questions in Organic Chemistry, which is "to be treated in an elementary manner, and with special regard to its applications in physiology, pharmacology, and pathology."

The Second Examination for Medical Degrees (Part II.) takes place twice in every year, commencing in 1914 on the second Monday in March, and on the first Monday in July. The subjects of the examination are Human Anatomy and Embryology, Physiology, and Pharmacology, including Pharmacy and Materia Medica. No candidate shall be admitted to the examination unless he has passed the First Examination for Medical Degrees at least 18 months previously, and has passed Part I. of the Second Examination for Medical Degrees. The fee for each entry to the whole examination is £8. For re-examination in one subject it is £4.

M.B., B.S. Examination.—The M.B., B.S. examination takes place twice in each year, commencing on the fourth Monday in October and on the first Monday in May. Candidates will be examined in Medicine (including Therapeutics and Mental Diseases), Pathology, Forensic Medicine and Hygiene, Surgery, Midwifery, and Diseases of Women. The subjects may be divided into two groups, namely: (1) Medicine, Pathology, Forensic Medicine, and Hygiene; and (2) Surgery, Midwifery, and Diseases of Women. These groups may be taken either separately or together. The fee is £10 for each entry to the whole examination, and £5 for examination or re-examination in either group. There will be no separate examination held for Honours, but the list of candidates who have passed will be published in two parts, namely, an Honours list and a Pass list.

Doctor of Medicine.—The examination for this degree takes place twice in each year, commencing on the first Monday in December and on the first Monday in July. Candidates must have taken the degrees of M.B., B.S. not less than two years previously, but for those who have taken the M.B., B.S. degrees with honours, or have done certain original work, this period of delay may be reduced to one year. Candidates who have obtained their M.B. degrees in or before May, 1904, will not be required to hold the degree of B.S. before seeking the doctorate. They may present themselves for examination in one of the following branches, namely: (1) Medicine; (2) Pathology; (3) Mental Diseases; (4) Midwifery and Diseases of Women; (5) State Medicine; and (6) Tropical Medicine. Any candidate for the degree of M.D. may transmit to the Registrar, not less than two months before the commencement of the examination, a thesis or published work embodying the result of his own independent research in the branch of Medicine in which he is a candidate, and if the thesis be approved by the examiners, the candidate may be exempted from the written examination in that subject. The fee is £20, and for re-examination £10.

Master in Surgery.—The examination takes place twice in each year, and commences on the first Mondays in December and July. Candidates must produce certificates of having taken the degrees of M.B. and B.S. not less than two years previously (with certain exceptions, as in the examination for the M.D.) and of having subsequently held for at least six months a resident or non-resident Surgical hospital appointment. The fee is £20, and for re-examination £10.

Full details can be obtained free on application to the Academic Registrar, University of London, South Kensington, S.W. Students should apply direct to the University for this detailed information.

UNIVERSITY OF LONDON, UNIVERSITY COLLEGE.—FACULTY OF MEDICAL SCIENCES.—The Faculty of Medical Sciences comprises Physics, Chemistry, Botany and Zoology, also the Departments of Anatomy, Physiology, and Pharmacology (the Intermediate Medical Sciences), and the Departments of Hygiene and Public Health, and of Pathological Chemistry (Post-graduate Study). Full Preliminary and Intermediate Courses of study are provided for students desirous of obtaining the medical degrees of the University of London and as well as for students seeking the qualifications of other Universities and licensing bodies. University and King's Colleges have been constituted University Centres for the teaching of the Medical Sciences. A student can enter the College directly, and at the end of the first and second courses select the Medical School and Hospital.

Scholarships and Exhibitions.—Five annual University Entrance Exhibitions of £40 a year, six similar scholarships of £50 a year each in science subjects are annually awarded, and three Andrews' Entrance Scholarships. The Bucknill Scholarship of 135 guineas and two Exhibitions of 55 guineas are awarded on the results of an examination held in July. The Cluff Memorial Prize, value £15, is awarded for proficiency in Anatomy, Physiology, and Chemistry; the Schäfer Prize in Physiology, value £18, for proficiency in Physiology; the Sharpey Physiological Scholarship, value £150, for Research in Physiology.

Composition Fees.—Course for the first Medical Examination, 26 guineas; course for the second Medical Examination, 58 guineas; course for the first Examination of the Conjoint Board, 21 guineas; course for the second Examination of the Conjoint Board, 58 guineas.

The London Medical Schools recognised by the University with the title of "University of London," are:—University College, King's College, St. Bartholomew's Hospital Medical School, St. Thomas's Hospital Medical School, Westminster Hospital Medical School, Guy's Hospital Medical School, London Hospital Medical College, Middlesex Hospital Medical School, Charing Cross Hospital Medical School, St. Mary's Hospital Medical School, Royal Army Medical College, London School of Tropical Medicine, School of Medicine for Women, and the Lister Institute of Preventive Medicine.

UNIVERSITY OF LONDON—KING'S COLLEGE, LONDON, STRAND.—In the medical division of the Faculty of Science students are prepared for their first examination (Chemistry, Physics, Biology), and for their second examination (Anatomy, Physiology, and Pharmacology), by the University Professors attached to King's College, London, and their assistants. At present four medical schools, viz., those attached to King's College Hospital, Westminster Hospital, St. George's Hospital, and Charing Cross Hospital, the teaching in which is restricted to the subjects of the final examinations, send their students to King's College for the purpose of tuition in the above-mentioned preliminary and intermediate studies. Numerous Scholarships and Prizes are offered.

Department of Public Health and Bacteriology.—This department of King's College is carried on in large laboratories in the Charing Cross Hospital Medical School Building, Chandos Street.

Full particulars as to courses of study, laboratory accommodation, hours, fees, etc., can be obtained on application to the Dean, Professor Halliburton, or the Secretary, Mr. Walter Smith, at the College.

UNIVERSITY OF DURHAM.

Two diplomas, one Licence and six degrees in Medicine and Hygiene are conferred—*viz.*, the degrees of Bachelor of Medicine, Bachelor of Surgery, Master of Surgery, Doctor in Medicine, Bachelor of Hygiene, and Doctor of Hygiene, Diploma in Public Health and Diploma in Psychiatry and the Licence in Dental Surgery. These degrees, diplomas and licence are open to both men and women.

For the degree of Bachelor of Medicine (M.B.), there are four professional examinations. The subjects are: For the first: elementary anatomy, biology, chemistry, and physics. For the second: Anatomy and physiology. For the third: Materia medica and pharmacy, pathology and elementary bacteriology, medical jurisprudence and public health; and for the fourth: Medicine, clinical medicine and psychological medicine, therapeutics, surgery and clinical surgery, midwifery, and diseases of women and children, and clinical gynæcology.

It is required that one of the five years of professional education shall be spent in attendance at the University College of Medicine and the Royal Victoria Infirmary, Newcastle-upon-Tyne. First and second year students (dating from registration) are not required to comply with the regulation regarding attendance on hospital practice. Candidates who have passed the First and Second Examinations of the University will be exempt from the First and Second Examinations of the Conjoint Board.

For the degree of Bachelor of Surgery (B.S.) every candidate must have passed the examination for the degree of Bachelor of Medicine of the University of Durham, and must have attended one course of lectures on operative surgery, and one course on regional anatomy. Candidates will be required to perform operations on the dead body, and to give proof of practical knowledge of the use of surgical instruments and appliances.

For the degree of Master of Surgery (M.S.) candidates must not be less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they can proceed to the higher degree of M.S. They must also have obtained the degree of Bachelor of Surgery of the University of Durham, and must have been engaged for at least two years subsequently to the date of acquirement of the degree of Bachelor of Surgery in attendance on the practice of a recognised hospital, or in the naval or military services, or in medical or surgical practice.

For the degree of Doctor of Medicine (M.D.) candidates must be not less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they proceed to the higher degree of M.D. They must also have obtained the degree of Bachelor of Medicine of the University of Durham, and must have been engaged for at least two years, subsequently to the date of acquirement of the degree of Bachelor of Medicine, in attendance on the practice of a recognised hospital or in the naval or military services, or in medical or surgical practice.

Candidates for any of the above degrees must give at least twenty-eight days' notice to the Secretary of the College of Medicine, Newcastle-on-Tyne. In the case of the M.D. (Essay) Examination, candidates must send in their essays six weeks before the date of the examination.

The New Royal Victoria Infirmary, containing 400 beds, was opened by the late King, in July, 1906. In the new infirmary adequate accommodation is provided for the study of the various special subjects, in addition to the ordinary clinical work. Practical midwifery can be studied at the Newcastle Maternity Hospital. Opportunities for practical study are also afforded by the Dispensary, City Infectious Diseases Hospital, Eye Infirmary, and at the Northumberland County Lunatic Asylum.

There are various appointments open to students, whilst the scholarships available are numerous and of considerable value.

Fees.—(*a*) A composition ticket for lectures at the college may be obtained—1. By payment of 72 guineas on entrance. 2. By payment of 46 guineas at the commencement of the first sessional year and 36 guineas at the commencement of the second sessional year. 3. By three annual instalments of 36, 31, and 20 guineas, respectively, at the commencement of the sessional year. A Composition Ticket for the course of lectures and practical work of the first two years of the curriculum may be obtained by the payment of 40 guineas on entrance. (*b*) Single courses of lectures, five guineas. (*c*) Fees for attendance on hospital practice: For three months' medical and hospital practice, six guineas; for six months, ten guineas; one year, fifteen guineas; composition fee in one payment, thirty-five guineas; or by two instalments—*viz.*, first year, twenty guineas; second year, eighteen guineas. In addition, two guineas yearly up to three years must be paid to the Committee of the Royal Infirmary. (*d*) Composition fee for lectures, &c., at the College for the Licence in Dental Surgery, 34 guineas. Composition fee for dental practical work at Newcastle Dental Hospital, 35 guineas.

A Licence in Dental Surgery has been instituted. Before admission to the Final Examination, each candidate must furnish evidence, (1) of having attained the age of 21 years, (2) of having undergone a three-years' pupilage in mechanical dentistry with a registered dentist, and (3) of having been engaged in professional study for at least four years subsequent to registration as a dental student. He must also sign such declaration as the University may determine, binding himself not to advertise for professional purposes. Examinations are held concurrently with the medical examinations, and the fees payable by candidates amount to £15.

The Senate of the University has decided to grant a Diploma in Psychiatry, full particulars of which may be obtained from the College Calendar.

Further particulars will be given on application to Prof. Howden, Secretary, University of Durham College of Medicine, Newcastle-on-Tyne.

UNIVERSITY OF MANCHESTER.

Candidates for degrees in medicine and surgery (M.B., Ch.B., M.D., Ch.M.) must attend classes in the University during at least two years, and for three years must pursue a course of medical study at any college or medical school recognised by the University.

They are required to have passed the Matriculation Examination, or such other examination as may from time to time be recognised for this purpose by the University. The Matriculation Examination is held in July and in September.

Before admission to the Degrees of Bachelor of Medicine and Surgery candidates are required to send in the usual certificates of age and study as at the other Universities. All candidates for these Degrees must have attended approved courses of both lectures and laboratory work, and must pass four examinations.

The final examination cannot be taken before the fifth year of medical study. The subjects of examination are as follows: 1, Medicine, systematic and clinical, including mental diseases and diseases of children; 2, Surgery, systematic, clinical, and practical; 3, Obstetrics and diseases of women; 4, Forensic medicine and toxicology.

The regulations relating to the M.D. and Ch.M. Degrees can be obtained on application to the Registrar.

The first M.B and Ch.B. is held in March, June, September, and December. The second examination is held in December, and in March; the third examination in March, June and December; the Final in June and December; the examination for Ch.M. in June only.

Fees.—Matriculation examination, £2, subsequent examination in the same year, 30s. First examination, £5; for any subsequent examination, £2. The fees for the Second Examination and for the Third and Final Examinations are the same as for the First Examination. A fee of £10 is payable on the conferring of the degree of M.D., a fee of £5 on the conferring of the degree of Ch.M.

The buildings include large laboratories, dissecting-rooms, library and reading-rooms, and are on the most modern principles. Students wishing to engage in anatomical, physiological, or pathological research will find excellent opportunity for study in the complete and well-furnished laboratories. Hospital practice is taken out at the Royal Infirmary, which contains 592 beds. The Cheadle Lunatic Asylum, St. Mary's Hospitals, the Southern Hospital, and other special hospitals also afford teaching facilities of great importance.

The numerous appointments are of considerable monetary value. The principal are:—The Leech fellowship of £100; Honorary Research Fellowships; Junior Research Fellowships in Public Health, two of the value of £50, each annually; Entrance scholarships in medicine, £100 (towards University and Infirmary fees); Ashby Memorial Research Scholarship in Diseases of Children, £100, awarded triennially; Dreschfeld Memorial Scholarship £30, awarded annually; Turner Medical scholarship of £20 to students who have completed a course of medical study in the University; Robert Platt physiological scholarship of the value of £50; Robert Platt zoological and botanical scholarship, £50; Professor Tom Jones memorial surgical scholarship of £100, awarded triennially; two Dauntesey medical scholarships, one of £45 and one of £35; John Henry Agnew scholarship in diseases of children, value £30, awarded annually; Graduate scholarship in medicine, £25, awarded annually; and many prizes. Robert Platt Exhibitions in Physiology, £15, awarded annually; Robert Platt Biological Exhibitions, £15, awarded annually; Sidney Renshaw Exhibitions in Physiology, £15, awarded annually; Professor Tom Jones Exhibition in Anatomy, £25, awarded annually.

Fees.—For courses of instruction for the degrees of M.B., and Ch.B., of the University:—For the first M.B. examination the total cost amounts to about 30 guineas payable on entry. A composition fee of 70 guineas, payable in three instalments of 30, 20, and 20 guineas, at the commencement of the second, third, and fourth years of studentship respectively, admits to the courses of instruction required for the degrees of M.B. and Ch.B.

Dental Fees.—The composition fee for candidates for the University degree of Bachelor of Dental Surgery is 60 guineas, and for candidates for the University diploma in Dentistry is 55 guineas, payable in two equal instalments at the beginning of the first and third years of studentship.

UNIVERSITY OF BIRMINGHAM.

The University of Birmingham grants Degrees of M.B., Ch.B., M.D., Ch.M., and also a B.Sc. in the subject of Public Health. As a rule, in order to obtain any of these Degrees it is necessary that a student shall have passed at least the first four years of his curriculum in attendance upon the classes of the University, but the Senate has power of recognising attendance at another University as part of the attendance qualifying for these degrees.

Degrees of Bachelor of Medicine and Bachelor of Surgery.—The student must have passed either the Matriculation Examination of the University or one of the following examinations, which will be accepted in lieu thereof for the present:—(*a*) The previous examination of the University of Cambridge; (*b*) Responsions of the University of Oxford; (*c*) The matriculation examination of any recognised University; (*d*) The leaving certificate (higher) of the Oxford and Cambridge Boards; (*e*) The Oxford or Cambridge senior local examination.

Matriculation Examinations are held in July and September each year.

Degrees of Doctor of Medicine and Master of Surgery.—At the end of one year from the date of having passed the Final M.B., Ch.B. Examination, the candidate will be eligible to present himself for the higher Degrees of either Doctor of Medicine or Master of Surgery or both, the regulations for which may be had upon application to the Dean. The University also grants a Degree and a Diploma in Public Health, and provides adequate instructions for the same.

The Composition Fee for University Courses for Degrees of M.B., Ch.B. is £85; the Composition Fee for Clinical Instruction at the General and Queen's Hospitals is £42; *total* cost for the full M.B., Ch.B. Curriculum including Examination Fees is £158 2s. 6d.

Dental Department.—The University grants the Degrees of Bachelor and Master of Dental Surgery (B.D.S. and M.D.S.), and a Diploma in Dental Surgery (L.D.S.). The whole of the instruction for which may be taken out in the University, with which is associated the Birmingham Dental Hospital. The Clinical instruction of Dental Students is carried out under the direction of the University Dental Clinical Board.

The fees for L.D.S. Diploma courses are as follows:—Composition Fee (University Courses), £60; Clinical Fees for Dental and General Hospital Instruction, £31 10s.; total cost for L.D.S. including Examination Fees, £114 15s.*

The total cost for Degree of B.D.S. and Diploma of L.D.S. is £149 1s.

THE GENERAL AND QUEEN'S HOSPITALS.—The practices of these hospitals are amalgamated for the purpose of clinical instruction under the direction of the University Clinical Board, by whom all schedules will be signed and all examinations conducted. The hospitals have a total of upwards of 500 beds. 8,000 in-patients and 80,000 out-patients are treated annually, and many valuable posts are open to students at both.

---

* Does *not* include fee for Mechanical Pupilage, which is 85 gns

Further information can be obtained from Professor Peter Thompson, Dean of the Medical Faculty.

UNIVERSITY OF LIVERPOOL.

The Degrees in the Faculty of Medicine are Bachelor of Medicine and Bachelor of Surgery (M.B. and Ch.B.), Doctor of Medicine (M.D.), Master of Surgery (Ch.M.), and Master of Hygiene (M.H.). The course of study for the Degrees of Bachelor of Medicine and Bachelor of Surgery is of five years' duration, and of this period two years must be spent at the University, the remaining three years can be taken in any medical school approved by the University.

For the Degree of M.D., a thesis is required which may be presented not earlier than one year after graduation, as M.B., Ch.B.

The degree of Ch.M. is given after a period of at least one year of further study after graduation as M.B., Ch.B., on the results of an examination.

The degree of M.H. is given after two years' study and examinations, and includes the D.P.H.

Diplomas.—Diplomas have been instituted in Public Health (D.P.H.), Ophthalmic Surgery (D.Ch.O), Tropical Medicine (D.T.M.), and Veterinary Hygiene (D.V.H.). Special diplomas are also granted in Anatomy, Bacteriology, Bio-chemistry, and Parasitology after a course of study of three terms in the subject chosen and allied subjects.

Students may enter for the degrees of the University of Liverpool, or may study for the degrees, diplomas and qualifications of the other licensing bodies.

Hospitals.—The Clinical School of the University consists of four general hospitals—the Royal Infirmary, the David Lewis Northern Hospital, the Royal Southern Hospital, and the Stanley Hospital; and of five special hospitals—the Eye and Ear Infirmary, the Hospital for Women, the Infirmary for Children, St. Paul's Eye Hospital, and St. George's Hospital for Skin Diseases. These hospitals contain in all a total of 1,076 beds. The organisation of these hospitals to form one teaching institution provides the medical student and the medical practitioner with an unrivalled field for clinical education and study, and all are within easy access from the University. The period of hospital practice extends over the last three years of medical study. There are a large number of appointments to House Physicianships and Surgeonships both at the general and special hospitals, which are open to qualified students of the School. These appointments (20) in most cases carry salaries varying from £60 to £100 per annum.

Fellowships and Scholarships.—Fellowships, Scholarships, and Prizes of over £1,000 are awarded annually. Eight Fellowships, each of the value of £100, are awarded annually for research in Anatomy, Physiology, Pathology, Bacteriology, Gynæcology, and Bio-Chemistry, and in one or two cases are renewable. Two Lyon Jones scholarships, of the value of £21 each for two years, are awarded annually—a Junior Scholarship, open at the end of the first year of study to Liverpool University students in the subjects of the first M.B. Examinations, and a Senior Scholarship, open to all students in the school at the end of the second or third year of study, in the subjects of Anatomy, Physiology, Materia Medica, and Pharmacology. A University Scholarship of £25 awarded on the results of the second examination for the degree. The Derby Exhibition of £15 for one year is awarded in Clinical Medicine and Surgery in alternate years. Students may compete in their fourth and fifth years. A Clinical School Exhibition of £15 awarded under similar conditions. The Torr Gold Medal in Anatomy, the George Holt Medal in Physiology, the Kanthack Medal in Pathology, and the Robert Gee Book Prize, of the value of £5, for Children's Diseases.

Entrance Scholarships.—Two Robert Gee Entrance Scholarships, of the annual value each of £25 for two years, are offered annually for competition. The holder is required to take out the First M.B. Course for the University Degree in Medicine.

The University also grants a Diploma in Dental Surgery (L.D.S.) and Degrees in Dental Surgery (B.D.S. and M.D.S.). The courses of systematic instruction are given in the University buildings, five minutes walk from the Dental Hospital.

Communications should be addressed to the Dean, Mr. K. W. Monsarrat, F.R.C.S., the University, Liverpool.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

The Diploma of Tropical Medicine, University of Liverpool.—The school is affiliated with the University of Liverpool and the Royal Southern Hospital of Liverpool. The instruction given occupies six hours a day for five days a week during thirteen weeks. Each Course consists (1) of a systematic series of lectures on tropical medicine and sanitation delivered by the Professor of Tropical Medicine at the University; (2) of additional lectures on special African and other diseases delivered at the University; (3) of systematic lectures and demonstrations on tropical pathology, parasitology and bacteriology by the Walter Myers Professor, at the University; (4) of similar instruction on medical entomology by the Professor of Entomology at the University; (5) of clinical lectures and demonstrations delivered at the Royal Southern Hospital by the Physician in charge of the Tropical Ward, the Professor, and the Walter Myers Lecturer; and of lectures or demonstrations by assistant teachers.

In December and April an examination is held by the University for its Diploma of Tropical Medicine (D.T.M.), which is open only to those who have been through the course of instruction of the school. The examination lasts three days, and consists (1) of papers on tropical medicine, tropical pathology, and tropical sanitation and entomology respectively; (2) of a clinical examination; and (3) of an oral examination.

The fee for the full course of instruction is thirteen guineas, with an extra charge of ten shillings and sixpence for the use of a microscope, if required. The fee for the examination is five guineas. Applications should be made to the Dean of the Medical Faculty, University of Liverpool, from whom prospectuses may be obtained.

Two University Fellowships of £100 a year each are open to students of the school, amongst others. Accommodation for Research work is to be had, both at the University laboratory of the school, and at its Research Laboratories at Runcorn (sixteen miles distant from Liverpool).

Since it was instituted ten years ago the school has employed thirty different investigators paid out of its funds, and has despatched to the tropics thirty scientific expeditions, many of the workers having been taken from among its students. The work done by them has been published in twenty-one special memoirs with many plates and figures, besides text books and numerous articles in the scientific press. From the beginning of 1907, however, the Memoirs have been succeeded by the Annals of Tropical Medicine and Parasitology, published by the Committee, and open to outside contributors. (Apply to the Secretary, B10, Exchange Buildings, Liverpool). The Mary Kingsley Medal is awarded by the School for distinguished work in connection with tropical medicine, and has been given to Colonel Bruce, Professor Koch, Dr. Laveran, Sir Patrick Manson, Lord Lister, Professor Looss, Professor Danielewsky, Dr. Charles Finlay, Mr. W. M. Haffkine, Professor Golgi, Colonel Gorgas, Professor Theobald Smith, and Rt. Hon. Joseph Chamberlain, M.P., and others.

UNIVERSITY OF BRISTOL.

The University grants the conjoined degrees in the Faculty of Medicine of M.B., Ch.B., the degree of M.D., Ch.M., B.D.S., and M.D.S.; also diplomas in Public Health (D.P.H.) and in Dental Surgery (L.D.S.).

The conjoined Degrees of M.B., Ch.B.—The curriculum occupies five years and a half. The University lectures and laboratory courses are attended in the large and well equipped new wing of the University. Hospital practice and Clinical instruction are provided in the allied hospitals, which together afford upwards of six hundred beds and a very large external midwifery department. Three years at least must be spent in the University, and two of them subsequently to passing the second examination.

Degree of B.D.S.—The curriculum occupies five years. Mechanical Dentistry may be studied in the new and well equipped University Laboratory under the supervision of a skilled mechanic. In this laboratory the whole of the mechanical work for both the Bristol Royal Infirmary and the Bristol General Hospital is done by the pupils. Lectures and ordinary laboratory work are attended in the University, the Metallurgical laboratory is in the Chemical department, and has been specially fitted for the purpose.

Diploma in Dental Surgery, L.D.S.—The curriculum occupies four years, and runs on very similar lines to that for the B.D.S. It is not, however, necessary to pass the matriculation examination, and some subjects required for the degree are omitted. Candidates for either the B.D.S. or L.D.S. must be registered Dental students.

Diploma in Public Health.—The necessary laboratory work is done in the University in the Chemical and Pathological departments. The remainder of the curriculum is taken under the Medical Officer of Health for the City and County of Bristol (Lecturer in Public Health) and the Assistant Medical Officer for the Port of Bristol (Demonstrator in Public Health).

N.B.—*Although the various courses are primarily designed for the University degrees and diplomas, equal attention is paid and equal facilities are offered to students who enter for the degrees of other Universities, such as the University of London, and for the diplomas of the various examining bodies.*

Women are admitted to all degrees and diplomas, and to the courses of study necessary for them. The University Hall of Residence is situated at Clifton, within a short distance of the University. Particulars of residence may be obtained from Miss M. C. Staveley, M.A., at the University.

Inclusive Fees.—For the M.B., Ch.B. curriculum, 140 guineas; for the B.D.S. curriculum (including mechanical pupilage), 190 guineas; for the B.D.S. curriculum (excluding mechanical pupilage), 115 guineas; for the L.D.S. curriculum (including mechanical pupilage), 168 guineas; for the L.D.S. curriculum (excluding mechanical pupilage), 93 guineas; for the D.P.H., 30 guineas. Arrangements can be made for paying these fees by instalments.

Appointments (Undergraduate).—Clinical Clerkships, Dresserships, also Ophthalmic, Obstetric, and Pathological Clerkships are tenable at the Bristol Royal Infirmary and the Bristol General Hospital. In these institutions the Dressers reside in rotation free of charge.

Appointments (Post-Graduate).—At the Bristol Royal Infirmary:—Two House Surgeons, £100 each per annum; two House Physicians, £100; Resident Obstetric and Ophthalmic House Surgeon, £75; Throat, Nose, and Ear House Surgeon, £75; Casualty Officer, £50: Dental House Surgeon, £100. All these appointments are made for twelve months, except that of Casualty Officer, which is for six months. From the resident officers a Senior Resident Officer is appointed at an additional salary of £30. At the Bristol General Hospital:—Senior House Surgeon, £150 per annum; Casualty House Surgeon, £105 per annum if another resident appointment has been previously held; two House Physicians, £80; House Surgeon, £80; Dental House Surgeon, £200 per annum. All these appointments are for six months, except that of Dental House Surgeon, which is for two years.

The Winter Session opens on September 30th.

UNIVERSITY OF LEEDS.

The school of medicine attached to this University was founded in 1831 as the Leeds Medical School. The building, erected on a site contiguous to the infirmary, contains one of the finest dissecting-rooms in the United Kingdom, extensive laboratories for physiology and pathology with the most recent improvements in fittings and apparatus, ample lecture-room accommodation, a large library, and separate museums for pathology and anatomy. Professors and lecturers are attached, and the clinical teaching is given by the physicians and surgeons attached to the Leeds General Infirmary, one of the largest in the United Kingdom, having 520 beds, with a staff of physicians and surgeons of considerable eminence. Ophthalmic demonstrations and demonstrations of skin diseases are given in the infirmary by surgeons in each department, where also are obtainable various clinical clerkships, dresserships, and other appointments; and an extern maternity charity is attached, at which the necessary attendance at labours can be taken. Besides the infirmary there is a large dispensary, a large hospital for infectious diseases, a hospital for women and children, and a maternity hospital, all of which are open to students of the school.

Scholarships, Prizes, etc.—(1) An entrance scholarship of £73 2s. 6d. There is also a Hardwick prize in clinical medicine, a McGill prize in clinical surgery, each of the value of £10. Thorp scholarship of about £25 a year in forensic medicine and hygiene, and a Scattergood prize of £5 in midwifery, besides silver and gold medals and other class prizes. The composition fee for attendance upon all the required courses of school lectures is £73 2s. 6d. for University students who have attended the preliminary scientific courses, and the same for non-University students, exclusive of chemistry and biology.

The composition fee for medical and surgical practice and clinical lectures is £42 in one sum, or two instalments of £22 each. These fees are not included in the composition fees for lectures and are payable separately.

A scholarship of £42 to cover the cost of medical and surgical practice is offered annually by the University.

Degrees and Diploma in Dental Surgery are obtainable at this University, being Bachelor of Dental Surgery (B.Ch.B.), and Master of Dental Surgery (M.Ch.D.). Candidates for the degree of Bachelor of Dental Surgery are required to have passed the Matriculation Examination, to have pursued thereafter approved courses of study for not less than five academic years, two of such years at least having been passed in the University subsequently to the date of passing Parts I. and II. of the first examination, and to have completed such period of pupilage or hospital attendance, or both, as may be prescribed by the Regulations of the University. No candidate shall be admitted to the degree who has not attained the age of twenty-one years on the day of graduation.

Candidates for the diploma in Dental Surgery are required to present certificates showing that they have attained the age of twenty-one years, that they have attended courses of instruction, approved by the University, extending over not less than four years, two of which must be spent in the University, and that they have completed a pupilage of three years, two of such years at least having been taken before the First Professional examination. Candidates are required to satisfy the Examiners in the several subjects of the following examinations: A preliminary examination in Arts; a Preliminary examination in Science; the First Professional examination; and the Final examination.

A Diploma in Public Health (D.P.H.) is granted after examination under the usual regulations, also a Diploma in Psychological Medicine.

UNIVERSITY OF SHEFFIELD.

By the Charter granted in 1905, this University is permitted to grant degrees in medicine. All its courses and all its degrees are open, without restriction, to both sexes. The new buildings of the University, opened by his late Majesty King Edward in 1905, are situated at the west end of the city, overlooking on two sides the adjoining Weston Park. The medical department occupies the entire north wing of the University quadrangle, and is within easy reach of the various hospitals, with which it is connected for clinical purposes.

These are as follows:—The Royal Infirmary contains 326 beds, and the Royal Hospital 191 beds. The practices of the two Institutions are amalgamated for the purpose of clinical instruction, giving a total of over 500 beds for the treatment of medical, surgical and special cases. During the last year over 6,000 patients passed through the wards of the two institutions, while those attending as out-patients numbered over 45,000. The Jessop Hospital for Diseases of Women contains 80 beds, with about 900 in-patients, and over 3,000 out-patients; also a Maternity Department, with about 450 in-patients per annum, and about 700 out-patient cases attended. Special courses on fevers are held at the City Fever Hospitals (570 beds), and on Mental Diseases at the South Yorkshire Asylum (1,610 beds).

Appointments.—The following are open to all students who have passed their examinations in anatomy and physiology:—Casualty Dresserships, Surgical Dresserships, Medical Clerkships, Pathological Clerkships, Ophthalmic Clerkships, Clerk to the Skin Department, etc.

Fees.—Composition fee of £80, payable in three instalments, viz.:—£24 at commencement of first year of study; £28 at commencement of second year of study; £28 at commencement of third year of study. This composition fee entitles the student to attendance on all the courses of lectures and practical classes, required for a degree course in the University, or for the ordinary qualifications in medicine and surgery of the examining boards.

Composition Fee for Medical, Surgical, Gynæcological and Obstetrical Hospital Practice (except Pharmacy).—Fee for the full period of hospital practice required by the examining boards:—£49 17s. 6d., payable in three instalments.

Dental Department.—In connection with the University there is a complete dental department, which is fully recognised by the various examining bodies, and students are able to get their full curriculum here.

Scholarships and Fellowships.—Entrance Medical Scholarship of the value of from £122 to £130, open to both sexes, awarded in June each year. Four Town Trustees' Scholarships, value £50, tenable for three years. Town Trustees' Fellowship, value £75, open to graduates of the University, tenable for one year. Mechanics' Institute Scholarship, value £50, tenable for one year, and renewable for a second year. The Frederick Clifford Scholarship, value about £50 per annum, tenable for two years, open to graduates of the University; and the Kaye Scholarship, value about £22 10s. A Gold Medal is offered annually for the best student in clinical medicine and clinical surgery. A Bronze Medal is awarded annually to the student who has gained first place in the examination for the full course in each year.

Degrees.—Candidates for a medical degree must have matriculated in the University or have passed such other examination as may be recognised for this purpose by the University and sanctioned by the Joint Matriculation Board. The subjects required by the General Medical Council must be included in the matriculation examination, or its recognised substitute. The degrees in medicine obtainable are Bachelor of Medicine and Bachelor of Surgery (M.B., Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.); conditions and particulars of which may be obtained on application to the Dean.

At the University of Sheffield post-graduate courses are held annually. These courses are specially arranged for practitioners, and the work done is mainly clinical and practical.

A Diploma in Public Health is also granted by the University.

UNIVERSITY OF WALES.

The School of Medicine, in University College, Cardiff, which is one of the constituent colleges of the University of Wales, has since its foundation, in 1883, prepared students for the Preliminary Scientific Examination of the University of London, and for the corresponding examinations of other licensing bodies. Chairs of Anatomy, Physiology and Pathology and Bacteriology and Lectureships in Materia Medica and Pharmacy and Histology and Embryology have been established, making it possible for students of medicine to spend three out of the five years of prescribed study at Cardiff. Arrangements with the managing committee of King Edward VII.'s Hospital, Cardiff, give students of the College the privilege of attending this large and well-ordered hospital, which is situated within five minutes' walk of University College. Many students, especially from Wales and Monmouthshire, avail themselves of the opportunities thus afforded to pursue the earlier part of the medical curriculum near home. All classes are open alike to both men and women students over sixteen years of age. The courses of instruction given at Cardiff are recognised as qualifying for the examinations of the Universities, Royal colleges, and other licensing bodies of Great Britain and Ireland. Having spent at least three years in study at Cardiff, and having passed the examinations in these years, a student may proceed to London or elsewhere and complete his qualifying course for a University degree or for a college diploma.

Students preparing for the first and second examinations of the Conjoint Board for England, or for the corresponding examinations of the Conjoint Board for Scotland, may compound for their classes by paying a single composition fee of £41 10s., or by paying £20 and £24 10s. at the beginning of their first and second years respectively. Those preparing for the First and the Second Examinations for Medical Degrees of the University of London may compound for their three years' instruction at Cardiff by paying a single composition fee of £63, or by paying £20, £28 and £21 at the beginning of their first, second and third years respectively.

In 1899 a department of Public Health was established, and lecturers in bacteriology and in public health and hygiene were appointed. Medical men preparing for the diploma in Public Health and Hygiene of the University of Wales can attend complete courses of lectures and laboratory instruction in this department. These courses are also recognised by the University of Cambridge, by the Royal Colleges of Physicians and Surgeons, by Victoria University, and other Examining Boards.

In the case of medical students, attendance on the class of hygiene and public health is accepted by the Universities of London and Cambridge, and by the Conjoint Examining Board of England

Courses of lectures to midwives, adapted to the requirements of the Central Midwives Board, under the Midwives Act, are commenced in October, January, and April. The lectures are suitable both for pupil midwives and practising midwives, as well as for nurses who desire to enter for the examination for certification under the Act.

Scholarships and Free Studentships.—The attention of students about to matriculate is drawn to the entrance scholarships and Free Studentships which are offered at the college for competition in April, most of which may be held by medical students. Full particulars of the examination for these may be obtained from the Registrar, or from the Dean of the Medical Faculty.

THE ENGLISH COLLEGES.

The medical corporations in England are the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London. The two Royal Colleges now co-operate to hold a series of examinations, on passing which the candidate receives the diploma of Licentiate of the Royal College of Physicians (L.R.C.P.), and Member of the Royal College of Surgeons (M.R.C.S.). The Society of Apothecaries grants a complete diploma (L.S.A.) in medicine, surgery, and midwifery.

Conjoint Examining Board in England.

Candidates for the above licences are required to complete five years of professional study at recognised medical schools and hospitals, after passing the preliminary examination, of which six months may be spent at an institution recognised by the Board, to comply with the following regulations and to pass the examinations hereinafter set forth.

Professional Examinations.—There are three examinations, each being partly written, partly oral, and partly practical. These examinations are held in the months of January, April, July, and October, unless otherwise appointed, fourteen clear days' notice before the day on which the examination commences being required, the candidate transmitting at the same time the required certificates. The subjects of the first professional examination are Part I., Chemistry; Part II., Physics; Part III., Elementary Biology; and Part IV., Practical Pharmacy. Candidates may present themselves immediately after passing the preliminary examination in general education, provided they are able to produce the certificates required. They must present themselves for examination in Parts I. and II. together, until they have reached the required standard to pass in both or in one of these parts, but they will not be allowed to pass in one part unless they obtain at the same time at least half the number of marks required to pass in the other part. Candidates may take Parts III. and IV. separately, or they may present themselves for the whole examination at one time. Practical Pharmacy may be taken with, or at any time before Part I. of the Final Examination. Candidates who shall produce satisfactory evidence of having passed an examination for a degree in medicine in any of the subjects of this examination conducted at a University in the United Kingdom, India, or in a British Colony, will be exempt from examination in those subjects in which they have passed.

The fee for admission to the first examination is as follows:—For the whole examination, £10 10s.; for re-examination after rejection in Parts I. and II., £3 3s.; and for re-examination in each of the other parts, £2 2s.

The subjects of the second examination are anatomy and physiology. Candidates will be required to pass in both subjects at one and the same time. The study of anatomy and physiology will not be recognised until candidates have passed in two of the first three parts of the first examination. Candidates will be admissible to the second examination fifteen months from the date of passing the required subjects of the first examination.

Candidates referred at the second examination will be required, before being admitted to re-examination, to produce certificates that they have pursued, to the satisfaction of their teachers, in a recognised place of study, their anatomical and physiological studies during a period of not less than three months subsequently to the date of their reference.

The fees for admission to the second examinations are: £10 10s. for the whole examination, and £6 6s. for re-examination after rejection.

The subjects of the third and final examinations are:—Part I. Medicine, including medical anatomy, pathology, practical pharmacy, therapeutics, forensic medicine and public health. Candidates who have passed in practical pharmacy at the first examination will not be re-examined in that subject at the third examination. Part II. Surgery, including pathology, surgical anatomy, and the use of surgical appliances. Part III. Midwifery and gynæcology. Candidates may take this examination in three parts separately, or they may present themselves for the whole examination at one time, provided that Midwifery may not be taken until the whole curriculum is completed.

Fees for admission to the third or final examination are as follows:—For the whole examination, £21 0s. Part I.—For re-examination in medicine, including medical anatomy, pathology, therapeutics, forensic medicine and public health, £5 5s.; for re-examination in practical pharmacy (if taken at this examination), £2 2s. Part II.—For re-examination in surgery, including pathology, surgical anatomy, and the use of surgical appliances, £5 5s. Part III.—For re-examination in midwifery and gynæcology, £3 3s.

Candidates referred on the third or final examination, or on one or more of the three parts into which they may have divided it, will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and will be required, before being admitted to re-examination, to produce a certificate, in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, during the period of his reference; and in regard to midwifery and diseases peculiar to women a certificate of having received, subsequently to the date of his reference, not less than three months' instruction in that subject by a recognised teacher. A candidate who possesses a registrable qualification is admissible to re-examination without producing additional certificates.

Regulations for Colonial, Indian, and Foreign Candidates, and University Candidates.

Persons holding a Colonial, Indian, or a foreign qualification entitling them to practise medicine in the country of origin, and conferred after a course of study and examinations equivalent to those required by the Royal Colleges, are admissible to the second and third (final) examinations forthwith.

Members of a University in the United Kingdom and Graduates of Medicine of certain recognised Colonial or Foreign Universities are, under certain conditions, eligible for admission to the third (final) examination two years after passing at the University in the subjects included in the first and second examinations of the Board.

Royal College of Physicians of London.

Members.—The membership of the College is granted after examination to persons above the age of 25 years who do not engage in trade, do not dispense medicine, and do not practise in partnership. This diploma is only granted to persons already registered, or who have passed the final examination for the licence.

Medical graduates of a recognised University are admitted to a pass examination, but others must have passed the examinations required for the licence of the College. The examination, which is held in January, April, July, and October, is partly written and partly oral. It is directed to medicine, and is conducted by the president and censors. Candidates under 40, unless they have obtained a degree in arts in a British University, are examined in Latin, and either Greek, French, or German. Candidates over 40 are not so examined, and the examination in medicine may in their case be modified under conditions to be ascertained by application to the Registrar. The fee for the membership is £42, but if the candidate is a licentiate £15 15s. is deducted. In either case £6 6s. has to be paid before examination.

Royal College of Surgeons of England.

Membership.—The candidates are now subject to the regulations of the Conjoint Board.

Fellowship.—The Fellowship of the College of Surgeons is granted after examination to persons at least 25 years of age, who have been engaged in professional studies for six years. There are two examinations—the first in anatomy and physiology, which may be passed after the third winter session; the second chiefly directed to surgery, which may be passed after six years of professional study. The second examination may be passed before attaining the age of 25, but the diploma is not granted until that age is reached. Candidates for this part of the examination must have passed the final examination of the Conjoint Board in England, and have been admitted members of the College before they can be admitted thereto, except in the case of graduates in medicine and surgery of recognised Universities of not less than four years' standing. The diploma of Fellow is granted to successful women candidates subject to the provisions of the Medical Act, 1876, and of the Bye-Laws of the College.

Fees.—First examination, £5 5s.; second examination, £12 12s. The total fee payable on admission to the Fellowship is £31 10s., except for members, when the fee is £21. (The examination fees to the extent of £17 17s. count as part of the total fee.) Further information can be obtained on application to the Secretary of the Examining Board in England, Examination Hall, Queen Square, Bloomsbury, London, W.C.

Society of Apothecaries of London.

Primary Examination.—This examination consists of two parts: Part I.—Elementary biology, Chemistry, Chemical physics, including the elementary mechanics of solids and fluids; Heat, Light, and Electricity. Practical chemistry, Materia medica, and Pharmacy. A synopsis indicating the range of the subjects may be obtained on application. Part II.—Anatomy and Physiology and Histology. The examination is held in January, April, July, and October.

The final examination is held monthly, except the month of September, and is divided into Sections 1 and 2.

Section 1 consists of three parts:

Part I. includes: Principles and Practice of Surgery, Surgical Pathology, and Surgical Anatomy, Operative Manipulations, Instruments and Appliances.

Part II. includes: (*a*) The Principles and Practice of Medicine, including Therapeutics, Pharmacology, Pathology, and Morbid Histology. (*b*) Forensic Medicine, Hygiene, Theory and Practice of Vaccination; and Mental Diseases.

Candidates passing either (*a*) or (*b*) will not be re-examined therein.

Part III. includes: Midwifery, Gynæcology, and Diseases of New-born Children, Obstetric Instruments and Appliances. Candidates may enter for Parts I., II., and III. together or separately.

Section 1 of the Final Examination, or any part thereof, cannot be passed before the expiration of 45 months from the date of commencement of medical study.

Section 2.—This section consists of two parts:

Part I.—Clinical Surgery.

Part II.—Clinical Medicine and Medical Anatomy. Section 2 cannot be passed before the expiration of the fifth year.

Fees.—Primary examination, £5 5s.; final examination, £15 15s.; total fee, £21.

Further information, with particulars as to the course of study and of the certificates required, can be obtained from the Secretary to the Court of Examiners, Apothecaries' Hall, E.C.

This licence is a registrable diploma in Medicine, Surgery, and Midwifery, and qualifies the holder to compete for medical appointments in the Army, Navy, and Indian Services, also for Poor-law, Civil, and Colonial appointments.

The Gillson scholarship in Pathology of the annual value of £90, tenable for one year, is open to Licentiates of the Society and to candidates for the diploma who obtain it within six months of election to the scholarship. An examination in the art of prescribing is held annually, in January, at which the following prizes are awarded:—A gold medal of the value of £6; a silver medal, and a prize of books.

LONDON SCHOOLS.

The Schools of Medicine in the Metropolis are the following, the scholarships, prizes, students' appointments, fees, &c., being set forth in connection with each place named. The names of the hospital staff, lecturers, residential terms, and detailed information will be found, as a rule, in our advertisement columns.

St. Bartholomew's Hospital.—This hospital has 750 beds, and for many years past the school attached has had a larger number of students than any other medical school in London. Laboratories have been specially equipped for the study of pathology, bacteriology, public health, chemistry, biology, physics, and chemical pathology, and two additional operation theatres, new casualty and out-patients' departments, eight special departments, quarters for the junior staff, a dining-hall and a common-room for students have recently been built. Collegiate residence is permissible, subject to the ordinary rules.

Appointments.—Ten house physicians and ten house surgeons are appointed annually. During the first six months of office they act as "junior" house physicians and house surgeons, and receive a salary of £25 a year. During their second six months they become "senior" house physicians and house surgeons, and are provided with rooms by the hospital authorities, and receive a salary of £80 a year. A resident midwifery assistant, an ophthalmic house surgeon, and a house surgeon for diseases of the throat and nose are appointed every six months, and are provided with rooms and receive a salary of £80 a year. Two assistant anæsthetists are appointed, and receive salaries of £120 and £100 a year respectively. An extern midwifery assistant receives a salary of £80 a year. Chief assistants and clinical assistants are also appointed in each of the special departments.

Scholarships, &c.—There are three open scholarships in science, £75, £75, £150, tenable for one year, and an Entrance Scholarship in Arts, value £100, and the Jeaffreson exhibition, value £50; at the end of first year four junior scholarships of £30, £20, £25, £15, respectively; Treasurer's prize for practical anatomy; Foster prize in practical anatomy; senior scholarship, value £50, for anatomy, physiology, and chemistry; Wix prize, Hichens prize, two Brackenbury scholarships, of £39, in medicine and surgery; Bentley prize, for reports of cases; the Kirkes gold medal for clinical medicine, with scholarship of £30. Shuter scholarship of £50; Skynner prize of £15; Sir G. Burrows' prize of £10; Matthews Duncan prize, medal and about £20; Willett medal and Walsham prize; Holden Research Scholarship in Surgery, value £105; Lawrence Research scholarship and gold medal, value £115 for pathology.

Composition Fees.—(1) For students commencing their medical studies, one sum on entrance, 165 guineas; or by four instalments of 45 guineas. (2) For students who have passed an examination in preliminary science, in one sum on entrance, 145 guineas; or by instalments. (3) For students who have finished two years of medical study but have not passed an examination completing their anatomical and physiological studies; if paid in one sum on entrance, 110 guineas; or by annual instalments. (4) For students who have completed three years of medical study but have not passed an examination in anatomy and physiology, 90 guineas; or by annual instalments. (5) University students who have passed an examination completing their anatomical and physiological studies, in one sum, 80 guineas; or by instalments.

Fees for preliminary scientific students:—20 guineas; for laboratory instruction for D.P.H., 15 guineas. Fuller details will be supplied on application to the Dean.

Charing Cross Hospital.—The School attached to this Hospital is situated in Central London, and contains new pathological and bacteriological laboratories, pharmacological, materia medica, and public health, laboratories, theatre. Clinical instruction is given in medicine, surgery, and obstetrics, and in the special departments, diseases of the skin, diseases of children, mental disorders, the throat, the eye, nose and ear, and in the orthopædic, Röntgen and electrical departments.

The school arranges for a complete education in all departments, with special teachers for all preliminary and intermediate subjects.

By arrangement with the University of London, all students for the Primary and Intermediate portions of the curriculum carry out the necessary courses of instruction at King's College Laboratories, situated within a few minutes' walk from the Hospital. The entire teaching of the school is devoted to pathological, clinical and other subjects of final studies.

Appointments.—Salaried resident medical officer, medical and surgical and obstetric registrars (annual). Twelve resident house physicians, twelve house surgeons, and two obstetric officers are appointed each year, after competitive examinations.

Fees.—The fees for the five years' curriculum may be paid either by composition fee, in one sum, on joining, or by sessional payment system.

London University Students.—10 guineas entrance, and 25 guineas annually. Composition fee (5½ years) 120 guineas.

Conjoint Diploma Students.—10 guineas entrance, 22 guineas annually. Composition fee (5 years), 110 guineas. Payment may also be made for individual classes and hospital practice when taken separately.

Final Students.—Students of any university in the United Kingdom who have passed the examinations in anatomy, physiology, chemistry, and other preliminary subjects, may here complete their studies on payment of an annual fee of 25 guineas, or of 55 guineas (3 years' course) in one sum.

The fees for *Dental Students* for the two years' curriculum may be paid :—(*a*) in one sum of 45 guineas on entry (2 years' course) ; (*b*) in two instalments—one of 27 guineas on entry, and the second of 22 guineas at the commencement of the second twelve months.

Prospectus and further information can be obtained on application to the Dean (Dr. William Hunter, F.R.C.P.), Medical College, Charing Cross Hospital, W.C.

St. George's Hospital. — This hospital is situated in the West End, facing Hyde Park, and is readily accessible from all parts of London or the suburbs. It has recently undergone extensive alterations and improvements, has a service of 436 beds, of which 100 are at the Atkinson-Morley Convalescent Hospital at Wimbledon, and contains special wards for ophthalmic cases and diseases of women.

Appointments.—Eight house physicians and eight house surgeons, entitled to reside and board in the hospital free of expense ; twelve general assistants, six assistants in the special departments. Candidates for the above offices are selected quarterly by competition from among the perpetual pupils, sixteen pupils being in office at any one time. Obstetric assistant with a yearly salary at the rate of £50 and board and residence in the hospital ; curator of the museum with a salary of £200 ; assistant curator with a salary of £100 ; a medical registrar, with a salary of £200 per annum ; a surgical registrar with a salary of £200 per annum ; a resident anæsthetist with a salary of £100 per annum ; an administrator of anæsthetics with a salary of £50 and two with salaries of £30 per annum. All offices are open to candidates without additional fee.

There are two Scholarships open to University students, of 70 guineas and £50, particulars of which will be furnished by the Dean.

The St. George's Hospital Club has smoking and luncheon rooms on the Hospital premises and an athletic ground of 14½ acres at Wimbledon, and a football and tennis courts have been laid out.

Fees.—For first year, £21 or £26 5s., according to the course. For second and third years, £63 in two instalments. Students entering their names on the books before commencing the preliminary or intermediate subjects pay no entrance fee. Fees for clinical students : Entrance fee, 10 guineas ; annual composition fee, 30 guineas.

Guy's Hospital.—This hospital is situated on the South side of London Bridge, and contains 617 beds in constant occupation. There are special wards for ophthalmic and obstetric cases, eight beds in the latter being appropriated for difficult cases of labour. Some beds have also been set apart for diseases of the ear and throat, and an "isolation" ward for cases of infectious diseases arising in the hospital. Attached to the hospital is a large residential college with rooms for about sixty men, whilst for students who prefer to live in the suburbs, no other hospital is so conveniently placed, the railway accommodation being good and close at hand. There is a complete School of Dental Surgery at this Institution, which is recognised by the Royal College of Surgeons of England ; the facilities thus afforded of completing the whole course of dental study including the pupilage in mechanical dentistry within the walls of one hospital will be appreciated by those intending to practise dentistry.

Appointments.—Eight house surgeons, eight house physicians, sixteen out-patient officers, sixteen assistant house surgeons, twelve obstetric residents, two ophthalmic house surgeons, twenty-four clinical assistants, and ninety-six dressers are selected annually from the students according to merit, and without payment. There are also a large number of junior appointments, every part of the hospital practice being systematically employed for instruction.

Scholarships.—Open scholarships of £100 and £50 in classics, mathematics, and modern languages. Open scholarships of £120 and £60 in chemistry, physics, and biology, and an open scholarship of £50 for University students in two of the following subjects :—Anatomy, physiology, organic chemistry, zoology, physics. The following are the scholarships, prizes, and medals open to students of the hospital :—Junior prizes for general proficiency, £20, £15, £10 ; Hilton prize for dissection, £5 ; Michael Harris prize for anatomy, £10 ; Sands Cox scholarship for physiology, £15 ; Wooldridge prize for physiology, £10 ; Beaney prize in pathology, £34 ; Golding-Bird prize in bacteriology, gold medal and £20 ; Treasurer's gold medal in clinical medicine ; Treasurer's gold medal in clinical surgery ; Beaney studentship in materia medica (tenable for 3 years), annually £31 10s. ; Gull studentship in pathology (tenable for 3 or 5 years), annually £150. The Arthur Durham travelling scholarship of the value of £100, triennially ; Oldham Prize in Ophthalmology, £30 annually

Fees.—A new system for payment of composition fees has been instituted at this school. Particulars may be obtained on application to the Dean, Guy's Hospital, London Bridge, S.E.

King's College Hospital.—The hospital is now situated at Denmark Hill, S.E., and will open on October 1st with 220 beds. The student, who pays a composition fee for the whole medical curriculum, carries out his preliminary and intermediate medical studies at King's College, Strand, and enters the hospital when he has passed his examination in anatomy and physiology. The hospital contains special beds for diseases of women, children, eye, ear and throat cases. There are also dental, skin, X-ray, and photographic departments. There are well-equipped pathological laboratories, and the collection of pathological specimens has recently been moved from King's College to the hospital. The various athletic clubs, students' societies, and the Common Room are now under the management of the Clubs and Societies' Union.

Scholarships.—Four of £50 : one in arts and one in science, and two entrance scholarships for university students ; a senior scholarship for fifth year students, and many special and class prizes are open for competition amongst students.

Appointments.—Senior medical, surgical and obstetric tutorships, Sambrooke medical and surgical registrarships, tenable for two years, each £50 per annum. Resident hospital appointments—*viz.*, senior and junior house physicians, physician accoucheur's assistant and assistant house accoucheur, and three house surgeons with free board and residence at the hospital ; house anæsthetist ; and senior and junior clinical assistants in special departments every six months.

F.R.C.S. Examinations.—Special classes are arranged for the final F.R.C.S. examinations. Further particulars can be obtained post free from the Dean, Dr. H. Willoughby Lyle, or the Secretary, Clifton Kelway, Esq., King's College Hospital Medical School, Denmark Hill, S.E.

Fees.—The fees payable by full students for the Course of Advanced Studies, whether for the University Degrees or for the Examinations of the Conjoint Examining Board, are : 80 guineas if paid in one sum ; 82 guineas if paid in instalments, as follows : 10 guineas at entrance ; first payment, 40 guineas on entering the Hospital ; 32 guineas at commencement of second year.

These fees also include membership of the Hospital Clubs and Societies' Union for three years.

Composition fees have been arranged for the complete medical courses.

(1) University of London Course, including the Preliminary Scientific, Intermediate, and Final Course. Fee, 150 guineas.

(2) Conjoint Examining Board Course, including the courses for the 1st, 2nd, and 3rd examinations. Fee, 150 guineas.

The London Hospital.—This hospital is the largest in Great Britain, containing, as it does, 922 beds. It has, moreover, wards and a teaching staff for every special department in the domain of medicine; the scholarships and prizes are many and valuable.

Appointments.—The salaried appointments open to students are those of medical registrars three, surgical registrars three, obstetric registrars one, aural registrars two, medical, surgical and obstetric tutors; senior dressers to out-patients; clinical assistants in the medical, surgical, ophthalmic, aural, light and skin, orthopædic, and electrical departments. There are also six resident house physicians and nine resident house surgeons, two accoucheurs, seven receiving-room officers, two emergency officers, and three pathological assistants. Also unpaid clinical assistantships in the various special departments. In addition there are numerous assistantships and clerkships and dresserships in the various departments.

Scholarships and Prizes.—At Entrance: Price scholarships in science, £100; in anatomy and physiology, £52 10s.; entrance scholarship in science, £50; Epsom scholarship, £126; Buxton scholarships in arts, £31 10s. After Entrance: anatomy and physiology prize, £25; Letheby prizes, £25; prizes in clinical medicine, surgery and obstetrics, £20 each; Duckworth Nelson prize, £10; Hutchinson prize, £40; Sutton prize, £20; Sir Andrew Clark prize, £26; Anderson prizes, £9; dressers' prizes, £40; practical anatomy prizes, £10; Douro Hoare prize, £5; Wynne Baxter prize, £5 5s.

Special classes for the 1st and 2nd M.B.Lond., the primary and final Fellowship, and other examinations are held. Those for the final and primary F.R.C.S. commence on September 2nd.

Fees for Full Course.—Entrance Fee 20 guineas; annual Fee 30 guineas.

Special entries can be made either for single courses of lectures or for hospital practice. The Students' Hostel has recently been extended. Residential accommodation is obtainable at a very reasonable rate close by, or in the suburbs a few minutes' distant by train.

A Dental School is attached to the Hospital and provides the Course of Instruction for the Dental Diploma examinations.

Fuller particulars can be obtained of the Dean, Professor William Wright, M.B., D.Sc., F.R.C.S.

St. Mary's Hospital.—This Hospital is situated at Paddington, near the terminus of the Great Western Railway, and at present contains 301 beds, of which 31, in the Clarence Wing, are devoted to treatment by Therapeutic Inoculation. An additional Operating Theatre has recently been opened in this wing. The Inoculation Department, instituted in 1906, has greatly expanded, and occupies a series of rooms in the new wing of the Hospital.

The Department is under the personal supervision of Sir Almroth Wright, F.R.S.

During the past year a new Casualty Department has been opened, with increased accommodation.

The Athletic Ground is situated at Park Royal, Acton, within easy reach of the Medical School. This provides ample accommodation for the various athletic clubs, and possesses a good pavilion.

Appointments.—All clinical appointments in the hospital are free to students of the Medical School, and the resident medical officers are chosen by competitive examination. Six house physicians, six house surgeons, four obstetric officers, and two resident medical officers to the inoculation wards are appointed in each year, and receive board and residence in the Hospital. Four casualty house surgeons, and two resident anæsthetists are appointed annually, the term of office being six months. They receive a salary at the rate of £100 per annum with board and residence.

Scholarships, &c.—One scholarship in natural science of the value of £100, open to any gentleman who has not completed a winter session of study at a medical school. One scholarship of the value of £50 and one of the value of £26 5s., under the same conditions. Two scholarships, each of 50 guineas, open to University Students. The scholarships will be awarded by examination on September 22nd, 23rd, and 24th.

Fees.—Fee for attendance on the full five years' curriculum of hospital practice and all lectures, demonstrations, and special tutorial classes, £140, paid in one sum on entering the school; or in instalments, £145.

Students who have completed their examinations in anatomy and physiology at the Universities of Oxford, Cambridge, or other University, are admitted as perpetual pupils on payment of a fee of 65 guineas in one sum, or 70 guineas in two annual instalments.

Complete Curriculum.—The Medical School provides complete instruction for the various medical degrees and diplomas, including courses of preliminary scientific and intermediate subjects, which are recognised by the University of London as approved courses for internal students. Students may join in October, January, or April.

The Middlesex Hospital.—The Hospital and Medical School are centrally situated, and within a few minutes' walk of the principal tube and railway lines of the Metropolis.

The Hospital contains 440 beds, including special wards for cancer cases, maternity and gynæcological cases, and for diseases of the skin and eye. The cancer wing (containing 90 beds) and special investigation laboratories offer unrivalled opportunities for the study of cancer, both in its clinical and pathological aspects. In the electro-therapeutical department students obtain instruction in the treatment of lupus and cancer by the X-ray method.

The Hospital and Medical School are fully equipped for the theoretical and practical teaching of all the subjects of the medical curriculum, and for the Diplomas in Public Health. Ample laboratory and class-room accommodation is provided, and there is a clinical laboratory where every facility is given for original research. Special classes are held to prepare students for the intermediate examinations of the Universities, and for the primary and final examinations for the F.R.C.S. (England) Diploma. There is a residential college in the hospital for a limited number of students.

Hospital Appointments.—All appointments are made without fee of any kind, and the following appointments are made annually:—Six house physicians, eight house surgeons, two obstetric and gynæcological house surgeons, two casualty medical officers, two casualty surgical officers, and two resident officers to the special departments. Non-resident qualified clinical assistants are appointed to assist in the various out-patients' departments.

Scholarships, Prizes, etc.—Three entrance scholarships, value £100, £50, and £25, and a University Scholarship, value £50 (for Oxford and Cambridge students), are awarded annually in September. A Freer Lucas Scholarship, value £126, for students of Epsom College, is awarded annually on the nomination of the headmaster. There are also two Broderip Scholarships, value £60 and £40 respectively; the Lyell Gold Medal and Scholarship, value £55 5s.; the John Murray Medal and Scholarship, value £25 (awarded every third year); the Freeman Scholarship, value £30; the Hetley clinical prize, value £25; the Leopold Hudson prize, value 11 guineas; and the second year's exhibition, value 10 guineas. There are also numerous class prize examinations. In connection with the cancer investigation department, the following scholarships are awarded:—"Emden" Cancer Research Scholarship, value £100, tenable for three years; Richard Hollins Research Scholarship, value £105; Salters' Company Cancer Research Scholarship, value £100; and a Cancer Research Scholarship, value £60.

Fees—The composition fee for general students is 135 guineas; for London University students, 145 guineas; for those who have passed the first examination for medical degrees, 120 guineas; those who have completed their anatomical and physiological studies, 70 guineas. The fee for dental students is 54 guineas. The fees may be paid by instalments.

The Amalgamated Students' Club includes: The Medical Society, The Common Room Society, The Cricket and Football Clubs, etc. The Athletic Ground, which is eight acres in extent, is situated within easy access of the Hospital—at Park Royal. A subscription to the Amalgamated Students' Club is payable by all General and Dental Students.

The Winter Session 1913-14 opens on October 1st at 3 p.m. The Introductory Address will be delivered by W. Sampson Handley, M.D., M.S., F.R.C.S., after which the prizes will be presented by Sir Squire Bancroft.

St. Thomas's Hospital.— This Hospital, with medical school attached, is situated on the southern Embankment of the Thames, facing the Houses of Parliament, and contains 602 beds, in constant use. The school buildings, which are separated from the Hospital by a quadrangle, comprise numerous theatres, laboratories, and class rooms, which are well adapted for the modern teaching of large bodies of students in all subjects of the medical curriculum. There is a large library and reading-room, and a very complete museum and gymnasium.

Appointments are open to all students. A resident assistant physician and a resident assistant surgeon are appointed annually at a salary of £150 with board and lodging. Four hospital registrars, two at an annual salary of £100 each, and two at £50 each, are appointed yearly. The tenure of these offices may be renewed for a term not exceeding two years. Four resident house physicians, four house surgeons, eight casualty officers, two resident obstetric house physicians, and two ophthalmic house surgeons are appointed each six months, also out-patient officers, and clinical assistants in the special departments.

Scholarships, Prizes, etc.—Five entrance scholarships are offered for competition in July and September—*viz.*, one of £150 and one of £60 in chemistry, physics, and biology at the commencement of the second year; one of £50 open to University students who have passed in anatomy and physiology, for a medical degree in any of the Universities of the United Kingdom, and have not entered as students in any London Medical school, and two scholarships in arts giving free tuition for the first year of curriculum. Numerous scholarships, prizes, and medals are open to competition throughout the whole career of a student, including a Fellowship of £100 given by the Salters' Company for research in pharmacology, and the Louis Jenner research scholarship, £60, for pathological research.

Special courses of instruction for the First Professional Examination and Intermed., M.B.Lond., for the Oxford and Cambridge examinations, and for the Primary and Final F.R.C.S. are held throughout the year.

The prospectus of the school may be obtained on application to Mr. G. Q. Roberts, Secretary of the Medical School.

Fees.—A system for payment of composition fees is in operation. Full details may be obtained of the Secretary.

University College Hospital and Medical School.—*Entrance.*—A student may enter the school as soon as he has passed the University of London Matriculation Examination, or one of the other qualifying preliminary examinations. In this case he will pursue his preliminary and intermediate studies at University College, and his final medical studies at University College Hospital Medical School. The student who has completed his preliminary and intermediate medical studies elsewhere, may enter the University College Hospital Medical School for his final medical studies only. Qualified medical men and others who can produce evidence of sufficient qualifications may be admitted to special departments for the purposes of research, or to hospital practice for certain definite periods.

University College Hospital now accommodates 305 in-patients, and possesses extensive out-patient and special departments.

Thirty-eight clinical appointments, eighteen of which are resident, are filled up by competition during the year, and are open to students at the hospital without extra fee.

The new medical school provides for lectures, demonstrations and practical work in all the final subjects of the medical curriculum. There are three lecture demonstration theatres for the teaching of morbid anatomy, bacteriology, and chemical pathology; also rooms equipped for the teaching of operative surgery and surgical anatomy, and two large lecture theatres.

The Medical Society, founded in 1828 for promoting the study of medical and surgical sciences amongst students, and for social intercourse, has rooms set apart for reading and recreation, and there is a large gymnasium with baths attached in the school buildings.

Scholarships, &c. — Entrance scholarship of 135 guineas, and two of 80 guineas each, the subjects being anatomy and physiology; the Graham scholarship in pathology, £200 per annum; the Atkinson-Morley surgical scholarship of £45 a year, tenable for three years; the Atchison scholarship, value £55, tenable for two years; Filliter exhibition for proficiency in pathological anatomy, value £30; Erichsen prize, operating case, value £10 10s., awarded for practical surgery; Fellowes gold and silver medals, the Liston gold medals, Alexander Bruce gold medal, Tuke medals for pathology, and other prizes, as well as certificates of honour, are awarded after competitive examinations in particular branches of study.

Composition Fees.—The Preliminary Scientific Course at University College, 26 guineas; Intermediate Course at University College, 58 guineas; final M.B. Course at University College Hospital Medical School, 80 guineas if paid in one sum, or 82 guineas paid in two instalments of 50 and 32 guineas.

Westminster Hospital.—This hospital is conveniently situated, facing the Abbey, and is readily accessible from all parts of the Metropolis. It contains 205 beds for general cases, and all the special departments. New school buildings have been erected close by, which afford accommodation for 150 students. The class rooms, museum, laboratories, and lecture theatre are excellent samples of modern erections, affording ample scope for study.

Appointments.—Medical and surgical registrars, each £50 per annum; two house physicians, three house surgeons, one assistant house physician, one assistant house surgeon, and a resident obstetric assistant. These officers, except the two first named, are all boarded free of expense. Qualified students are appointed to be clinical assistants in the various departments.

Scholarships, &c.—(*a*) Winter Session—The Guthrie scholarship, £60; subjects, Latin, mathematics, English, and either Greek, French or German. Two University scholarships, £50 each; subjects, anatomy and physiology. Natural science scholarship, £60; subjects, same as for Preliminary Science of University of London. Natural science scholarship, £30; subjects, chemistry and physics. (*b*) Summer Session.—Governors' scholarship in Chemistry and Physics, £40, Two University scholarships as for Winter Session. (*c*) Prizes to be competed for by unqualified men. Chadwick prize in Medicine and Surgery, 20 guineas, for students of any year not exceeding fifth. Bird medal and prize, in Obstetric Medicine, £14, for students who have completed fourth winter session. Sturges prize in Clinical Medicine, about £6, clinical surgery prize, £5. Abrahams prize in Clinical Pathology, 5 guineas. And class prizes in the various subjects.

Fees.—(*a*) The Annual Composition Fee is 25 guineas. This includes the subscriptions for membership of the Clubs' Union. (*b*) For shorter periods or for single courses the fees may be learned on application to the Dean. Fees for dental students, payable in one sum on entrance, 50 guineas, or in two instalments of £27 10s. each.

London (Royal Free Hospital) School of Medicine for Women.—The school is situated in Hunter Street, and the Royal Free Hospital is in Gray's Inn Road, close by. Students are prepared for the London University examinations and for the examinations of other Universities. A course of study is also arranged for the work required by the Royal Colleges of England, the Conjoint Colleges of Scotland and the Society of Apothecaries of London. The Royal Free Hospital contains 165 beds available for clinical study; and there is a large out-patient and casualty department. In addition to the ordinary systematic lectures at the school, clinical lectures are given at the hospital in Medicine, Surgery, Obstetrics, Ophthalmology, Dermatology, Rhinology, and Laryngology. Students hold clerkships and dresserships in each department.

Appointments.—House physicians, house surgeons, and a senior and junior resident obstetric assistant are appointed yearly. There are also non-resident appointments, including the anæsthetists and assistant anæsthetist, assistant and clinical pathologists, medical and surgical registrars, curator of museum and clinical assistants.

Fees.—The fee for the University of London course and the course for the Royal Colleges of England is £160 in one sum, or £170 if paid in five instalments. The fee for the course for the Scotch Colleges or Society of Apothecaries, including Elementary Science, is £140 in one sum, or £150 in four annual instalments. Particulars as to scholarships, etc., can be obtained from the Secretary and Warden, Miss L. M. Brooks, 8 Hunter Street, W.C.

London School of Tropical Medicine.—The next session of the School commences on the 1st of October. The past year has been one of the most successful on record, and for the session ending in July 64 students entered. The course is so arranged as to equip men for the Cambridge Diploma in Tropical Medicine and Hygiene, the London Diploma in Diseases and Hygiene of the Tropics, as well as for the London University M.D. Special facilities are now afforded for advanced students in entomology, helminthology and protozoology. A new course in Tropical Sanitation and Hygiene will be started in the winter session, and the new resident accommodation for students will be made available at the same time. The Wandsworth Scholarship of £350 and the Hon. Edward John Stanley Memorial Scholarship of £50 are awarded annually. The School provides three sessions each year.

INTRA-ACADEMICAL INSTITUTIONS IN LONDON.

The Royal Dental Hospital.—The teaching and hospital practice at this institution (situated in Leicester Square) are recognised by the various examining bodies. The new hospital and school, which was opened seven years ago, is complete in every detail with modern appliances. The clinic of the hospital is unrivalled, no fewer than 105,000 operations being performed in one year. The following scholarships and prizes are open to all full-term students:—Entrance scholarships, of the value of £50 and £25, being awarded in October. Subjects: Chemistry and Physics, Saunders scholarship, of the value of £20, awarded to the student obtaining the highest aggregate number of marks in a special examination of the subjects of the final examination for the Dental half of the L.D.S. A scholarship of £25, the subjects being Dental Mechanics and Metallurgy. There is also an Entrance Scholarship of £25 open to those who have studied "Dental Mechanics" under the tuition of a private practitioner. Storer-Bennet Research Scholarship, of the value of £50, awarded once in three years; the Alfred Woodhouse Scholarship of £35, and the Robert Woodhouse Prize of the value of £10, for practical dental surgery. Class prizes are awarded by the various lecturers. Provision is made for teaching Dental Mechanics, as required by the Royal College of Surgeons, the pupils being under the guidance of the staff of dental surgeons assisted by specially appointed demonstrators. The school contains an excellent library and a well-arranged museum.

Fees.—For the two years' hospital practice and lectures as required by the Royal College of Surgeons of England, the fee is £53 3s. in one instalment, or £55 13s. in two yearly instalments. The fee for the complete curriculum—namely, two years' instruction in Dental Mechanics and two years' hospital practice and lectures, is £150 if paid in one sum, or 150 guineas if paid in three instalments of 50 guineas each. For one year's instruction in Dental Mechanics the fee is 50 guineas. For one year's hospital practice, £21. For the courses in Chemistry and Physics for the Preliminary Science Examination, £10 10s. The necessary course of two years at a general hospital can be taken simultaneously with that at the Royal Dental Hospital. Further particulars can be obtained on application to the Dean.

National Dental Hospital (The Dental Department of University College Hospital).—This institution is situated in Great Portland Street, and excellent teaching facilities and hospital practice are here obtainable, special demonstrations being given by members of the staff. There are also a mechanical laboratory, bacteriological laboratory, X-Rays Department, museum, students' common room, a metallurgical laboratory, extraction and stopping rooms, lecture hall, regulations room, &c., all lighted by electricity, and warmed and ventilated after the most approved requirements; in fact, this institution may be pronounced a model dental department of a general hospital and school. The winter session commences at the same time as at the medical school, on October 1st. The medical tutor holds special classes before each college examination. The prizes include two entrance exhibitions, value £40 and £20, and the Rymer prize of £5 5s., the examinations for which are held in May and October. The fee for two years' hospital practice required by the full curriculum, including lectures, is £200.

For qualified medical men the two years' training in dental mechanics, required by the R.C.S. Curriculum, can be taken in the Mechanical Laboratory, and there is a "Composition Fee" including all the dental subjects of the curriculum of £120.

Medical students are admitted to the practice of the following Metropolitan general hospitals to which no medical school is attached, but each contains over 100 beds. Detailed particulars will be supplied on application to the various secretaries.

Prince of Wales's Hospital, Tottenham.—This hospital contains medical and surgical wards and a ward for children, having in all 125 beds, with a very large out-patient department. There are special departments for gynæcological cases, diseases of the eye, ear, throat and nose, medical electricity and radiography, and skin diseases. It is authorised by the University of London to give certificates of post-graduate study for the M.D. and M.S. degrees. (Post-graduates of both sexes are admitted to the practice of this Hospital.)

Great Northern Central Hospital, Holloway Road, N.—This institution has been greatly enlarged, contains 182 beds, cases in various special departments are treated, and the hospital is now recognised for study during the fifth year by the Conjoint Board. The Pathological Department has been extended and a Director of Clinical Pathology appointed. The practice of the hospital is open to practitioners and senior students, and clinical and pathological assistants are appointed in the wards and out-patient departments, as in the larger general hospitals.

Bethlem Royal Hospital.—In this Royal institution only cases of lunacy are received, and students intending to pursue this special branch have the best possible opportunities afforded here. The hospital contains 300 beds, and two resident house physicians who have recently obtained their diplomas to practise medicine and surgery are elected every six months, and are provided with apartments, complete board, attendance, washing, and an honorarium of 25 guineas per quarter. The students of certain specified London medical schools receive clinical instruction in the wards of the hospital, and qualified practitioners may attend for a period of three months on payment of a fee. Post-graduate lectures are also given.

National Hospital for Epilepsy and other Diseases of the Nervous System, Queen Square, W.C., contains, with its country branch, 200 beds and cots. It is recognised by the Conjoint Board where part of the fifth year of study may be devoted to clinical work. Clinical clerks are appointed to the physicians for out-patients, and courses of lectures and clinical demonstrations are given each year.

West End Hospital for Diseases of the Nervous System, Paralysis, and Epilepsy, Welbeck Street, W.—Graduates in medicine and senior students may attend demonstrations in the Out-patient Department. No fees are charged. The Savill Prize and Medal is awarded to the student who makes the best *viva-voce* examination and presents the best thesis after attending at least 25 demonstrations.

London Temperance Hospital.—This Institution is situated in the Hampstead Road, and contains 100 beds, and is conducted, as its name implies, on non-alcoholic principles by an excellent staff. The medical and surgical practice is open to students and practitioners. Appointments (vacancies for which are advertised in the medical journals): Surgical and medical registrars, resident medical officer, and one assistant resident medical officer.

Metropolitan Hospital, Kingsland, N.E.—This was until recently known as the Metropolitan Free Hospital, is situated in the north-eastern district of the Metropolis, and contains 123 beds, besides 18 beds at a convalescent home. It is a general hospital, with a large medical and surgical staff, in which various special departments for the treatment of diseases of the eye, throat, ear, diseases of women, etc. will be found.

SPECIAL HOSPITALS.

Hospitals for Consumption.

Hospital for Consumption and Diseases of the Chest, Brompton.—The largest institution for the treatment of affections of the chest in the United Kingdom, there being 333 beds in the two buildings. There are six house physicians who reside in the hospital, each for a period of six months. Lectures and demonstrations are given by members of the medical staff on Wednesdays at four o'clock, save during the vacations. Terms, £2 2s. for three months; £5 5s. perpetual. A special course of instruction in the diagnosis and treatment of pulmonary tuberculosis will be held in November. This hospital is recognised by the Conjoint Board, the University of London, and the Apothecaries' Society.

Mount Vernon Hospital, Hampstead and Northwood.—This institution, formerly called the North London Consumption Hospital, now carries on its work at Hampstead with 120 beds, and at Northwood with 106 additional beds, where treatment is carried out on the most modern lines, including the "open air" and other systems. Students are admitted to the practice of the hospital under certain conditions, and post-graduate courses are regularly delivered during the year.

City of London Hospital for Diseases of the Chest, Victoria Park.—This is a large and well-equipped hospital at the East End, containing 170 beds. Clinical lectures and demonstrations are given by the members of an exceptionally experienced staff. Fee for three months' attendance on hospital practice, 2 guineas; six months, 3 guineas.

Royal Hospital for Diseases of the Chest, City Road.—This hospital was established 100 years ago, and has been from time to time enlarged by the addition of a very complete out-patients' department, and also by the erection of a new wing, which provides accommodation for 80 in-patients.

Throat and Ear Hospitals.

Metropolitan Ear, Nose, and Throat Hospital.—This hospital was founded in 1838, and is situated in Fitzroy Square. The out-patient department is opened daily at 2.30 p.m. to practitioners and students desirous of acquiring clinical instruction and technical knowledge. Operations are performed on in-patients on Tuesdays, Wednesdays, Thursdays and Fridays at 10 a.m. Fee for one month's attendance at the hospital one guinea, and for three months two guineas.

Hospital for Diseases of the Throat, Golden Square, W.—This hospital contains 48 beds. Clinical instruction is given daily in the Out-patient Department on diseases of the nose, throat, and ear, and systematic courses of lectures are given during the winter session. There are nine clinics weekly, and an annual out-patient attendance of nearly 60,000. Major and minor operations daily (Mondays excepted) in different theatres. Thirty-six junior clinical assistants are appointed from among the students to assist the surgeons. Students are admitted to the practice of the hospital at the following fees:—Three months, £5 5s.; six months, £7 7s.; longer periods, £10 10s. Further details can be had by applying to the Hon. Med. Secretary.

Central London Throat and Ear Hospital.—This hospital contains accommodation for 30 in-patients. It has a very extensive out-patient department (over 50,000 attendances yearly), which is open daily to all medical practitioners and students, for the purpose of clinical demonstration and instruction. Courses of practical teaching are held twice weekly by members of the staff, which are open to qualified practitioners and advanced students. Each course is of about seven weeks' duration, and includes hospital attendance for that period.

Operations are performed daily (Saturday excepted) at 2 p.m. Special attention is devoted to scientific work in the newly-equipped laboratory. Full particulars will be supplied on application to the Dean.

Women and Children.

Hospital for Sick Children, Great Ormond Street, Bloomsbury, and Cromwell House, Highgate. This is the largest Children's Hospital in the United Kingdom, and contains 240 beds.

The practice of the Hospital is open to qualified medical men, and to students who have completed four years of medical study, the Hospital having been recognised by the Conjoint Board of England as a place where six months of the fifth year may be spent in clinical work. There are special ophthalmic, aural, dental, and electrical departments. There is also a Museum and Library in connection with the School. —Fee for three months' general hospital attendance, £5 5s.; perpetual, £10 10s.; £1 1s. for students satisfactorily undertaking clinical clerkships for not less than three months. Facilities are afforded for obtaining theoretical and practical instruction in Clinical Pathology and Bacteriology by daily attendance in the Pathological Laboratories, the fees for which are: For one month, £3 3s.; three months, £6 6s. For tickets and further information, apply to the Secretary, by letter, or by calling at the Hospital.

Queen Charlotte's Lying-in Hospital, Marylebone Road, N.W.—Qualified medical practitioners and medical students are admitted to the practice of this hospital. Certificates of attendance are recognised by all universities, colleges and licensing bodies. Fee for the course of four weeks, £8 8s. Students are accommodated at the new Residential College (5 Cosway Street) opposite the hospital.

Arrangements have also been made for the preliminary instruction in midwifery now required by the General Medical Council. This will include:—(1) Practical instruction in the methods of examination of pregnant women; (2) delivery of women in labour under the direct supervision of a medical officer of the hospital; (3) practical instruction in the treatment of the mother and child during the puerperium, including clinics held four times weekly by the visiting medical staff. Fee for this special course will be £5 5s. per month.

East London Hospital for Children, Shadwell.—This institution was founded about sixty years ago in one of the poorest quarters of the East End of London and contains 124 beds, with special departments for electric treatment. ophthalmic and dental surgery, etc.

Royal Waterloo Hospital for Children and Women.—This important institution situated in South London, has been rebuilt and appointed on completely modern lines, and now provides 90 beds.

The Samaritan Free Hospital for Women, Marylebone Road, N.W., has 56 beds, and offers excellent opportunities to qualified medical men for clinical study and training in the details of operative gynæcology. Fee: Three months, £3 3s. The success of the staff in this department has gained for them a European reputation. There are 51 beds.

The Hospital for Women, Soho Square.—The hospital contains 67 beds. In connection with this institution there is now an organised school of gynæcology open to qualified medical men and to students after their third year. Clinical assistants to the physicians and surgeons in the in-patient and out-patient departments are appointed every three months. Fee for the three months' course, and certificate, £8 8s.

Chelsea Hospital for Women, Fulham.—This institution contains 50 beds, and is served by a staff of considerable eminence. In connection with it there is a Convalescent Home at St. Leonards, in which 22 additional beds are at the disposal of the authorities.

Eye Hospitals.

Royal Eye Hospital, St. George's Circus, Southwark, S.E.—There are 40 beds and two cots at this Institution. Lectures, demonstrations, instruction in refraction work, and demonstrations on the specimens in the Museum are given throughout the year by the teaching staff. Patients are seen in the out-patient department and operations are performed in the theatres daily, morning and afternoon. There are annually upwards of 21,000 new out-patients attending the Hospital. Fees: For three months' practice and tuition, £3 3s.; perpetual, £5 5s. Further particulars of the Dean.

Royal Westminster Ophthalmic Hospital, adjoins Charing Cross Hospital in King William Street, It has about 40 beds and a very large out-patient *clinique*. The lectures and demonstrations are arranged with special reference to the requirements of practitioners and senior students. Fee, six months, £3 3s.; perpetual, £5 5s.

Royal London Ophthalmic Hospital, formerly in Moorfields, and recently rebuilt in the City Road, is the largest hospital devoted to this specialty in Great Britain, and contains 138 beds. Students and practitioners are admitted to the practice daily at 9 o'clock. Operations, 10 o'clock and after. Fee for six months, £3 3s.; perpetual, £5 5s. Further particulars of the Secretary.

Royal Eye Hospital, St. George's Circus, Southwark.—There are 40 beds and two cots. Fees, £2 2s. for three months, £3 3s. for six months, and £5 5s., perpetual. Courses are held on ophthalmoscopy, refraction, and diseases of the eye; fee, £1 1s. for each course, but perpetual students may attend each course once without extra fee. Pathology class, £1 1s. extra to cover cost of materials.

Central London Ophthalmic Hospital.—This hospital is situate in Judd Street, St. Pancras, has 26 beds and a large out-patient *clinique*. The post of clinical assistant is open to both men and women, who must be duly qualified and registered practitioners. During the winter session commencing in October lectures and demonstrations are given in all the branches of ophthalmology. A course lasting three weeks, comprising about forty lectures, will commence on September 15th, embracing all the branches of Ophthalmology—viz., Anatomy, External Diseases, Medical Ophthalmology, Use of the Ophthalmoscope, Refraction, Operative Surgery, Pathology, Bacteriology, and X-Ray. The Classes will be given by various members of the Staff, and are limited to a certain number of Students. Early application is therefore desirable. Syllabus and further particulars of the Dean of the School.

Skin Hospitals.

St. John's Hospital for Diseases of the Skin.—Out-patient department, 49 Leicester Square; In-patient department, 262 Uxbridge Road, W. This hospital has a well-equipped in-patient department, with 40 beds. It has a School of Dermatology at 49 Leicester Square, which is conducted by the medical staff of the hospital. During the past year the free course of Chesterfield Lectures have been well attended. The Out-patient Department has recently been rebuilt at a cost of £10,000, and contains a spacious laboratory and special electrical department which can be seen in operation every afternoon except Saturday. Special Courses in Pathology and Bacteriology can be arranged for. Clinical demonstrations are given every day at 2 p.m., on Selected Cases.

The Western Skin Hospital.—This is one of the oldest institutions of the kind in the metropolis, and was started as long ago as 1851. It has recently been removed to larger premises in the Hampstead Road, and the practice of the hospital is open to students and practitioners, who have the opportunity of seeing daily a large number of out-patients.

The Hospital for Diseases of the Skin, Stamford Street, Blackfriars.—This was the first hospital to be established for the treatment of cutaneous disorders in London. It has an extensive out-patient department, which is open to qualified practitioners. The hospital is shortly to be rebuilt.

METROPOLITAN POST-GRADUATE INSTITUTIONS.

Medical Graduates' College and Polyclinic.—This institution affords to medical practitioners special facilities for acquiring technical skill and advancing their medical and scientific knowledge. The building, which is large and commodious, is situated in Chenies Street, Gower Street, and contains lecture and consulting rooms, pathological and clinical laboratories, Röntgen ray room, an ophthalmoscope room, a library and museum, and reading and smoking rooms. *Cliniques*, at which patients are shown, are given every day of the week except Saturday, at 4 p.m. Lectures on Medicine, Surgery, and other allied subjects are delivered on Mondays, Tuesdays, Wednesdays, and Thursdays at 5.15 p.m. Four sessions of practical classes, each lasting six weeks, and two vacation sessions each of three weeks' duration, are held during the year, the subjects taught comprising anæsthetics, clinical examination of nervous system, clinical microscopy, clinical methods and physical diagnosis, clinical examination of stomach contents, cystoscopy, electro-therapeutics, gynæcology, intestinal surgery, laryngology, massage and medical electricity, ophthalmology, otology, orthopædics, rhinology, Röntgen rays, sigmoidoscopy, surgical anatomy and diagnosis. There are, in addition, extra-mural classes in operative surgery and practical anatomy with dissecting. Special tutorial classes in medicine, surgery, midwifery, and pathology for gentlemen reading for the higher qualifications have recently been instituted, and are conducted regularly throughout the year. The annual subscription for medical practitioners of either sex is One Guinea. Full information may be obtained from the Medical Superintendent, 22 Chenies Street, Gower Street, W.C.

West London Post-Graduate College.—The West London Hospital, Hammersmith, contains 160 beds; the post-graduate course was started in 1895. Instruction is given in the out-patient department daily at 2.15 p.m. by the assistant physicians and assistant surgeons. The physicians and surgeons attend daily at 2.30 p.m., when post-graduates can accompany them in their visits to the wards. Operations are performed daily at 2.30 p.m. Demonstrations are held every morning and there are lectures every evening at 5 p.m. (Saturdays excepted). Special classes are held in bacteriology, vaccine therapy, diseases of the eye, throat, X-rays, anæsthetics, intestinal surgery, tropical medicine, cystoscopy, venereal disease, operative surgery, &c.

Fees.—The fee for the hospital practice, including all the ordinary lectures and demonstrations, is £1 1s. for one week; £3 3s. for one month; £6 6s. for three months; £10 10s. for six months; £15 15s. for one year, and £30 for a life ticket. A course of attendance on either the medical or surgical practice alone may be taken out for the fee of £4 4s. for three months. The fee for three months' attendance in any one special department, other than medicine or surgery, is £3 3s. A prospectus containing full particulars will be forwarded on application to Mr. D. Armour, Dean.

West London Hospital, Hammersmith Road, W.—(Only qualified medical men are admitted to the practice of this Hospital). This hospital contains 160 beds, and has an extensive out-patient department. Three house surgeons and three house physicians are selected every six months. There are special departments for diseases of the throat, nose and ear, skin, women and children, and deformities. Electrical and X-ray departments have also been added.

North-East London Post-Graduate College.—This post-graduate school is established in connection with the Prince of Wales's General Hospital, Tottenham, N., which is recognised by the University of London as a place of post-graduate study for the M.D. and M.S. degrees, and by the Admiralty and the India Office for purposes of study leave. Facilities are here afforded to qualified medical practitioners for taking part in the work of an active general hospital, and for attending demonstrations in various branches of medicine, surgery, and gynæcology, with opportunities for clinical instruction in diseases of the eye, ear, throat, nose, skin, in fevers, psychological medicine, the administration of anæsthetics, radiography and dentistry. Cliniques, lectures and demonstrations are given by members of the teaching staff in the lecture room, in the wards, in the various out-patient departments, and in certain affiliated institutions. Operations are performed every afternoon of the week, except Saturday. Special classes, the attendance at which is limited, are arranged in gynæcology, the surgical diseases of children, including orthopædic surgery, diseases of the throat, nose and ear, diagnosis of diseases of the nervous system, ophthalmoscopy and refraction, clinical pathology, diseases of the skin, abdominal surgery, radiography, bacteriology (which is accepted by the University of Cambridge for the D.P.H. diploma) vaccine therapy, pathological chemistry and medical electricity. The fee for a three months' course of study, which may be begun at any time, in any single department, is one guinea. A fee of three guineas admits to the whole practice of the hospital for a similar term (one month, 2 guineas), and a perpetual ticket for the practice of the hospital may be obtained on payment of a fee of 10 guineas. The opening lecture of the Winter Session will be given by Sir Arbuthnot Lane, Bart., towards the end of October. Additional information with a syllabus of lectures, demonstrations, and special classes, may be obtained from the Dean of the Post-Graduate College, Dr. A. J. Whiting, at the Hospital, or at 142 Harley Street, W.

London School of Clinical Medicine is entirely reserved for qualified practitioners, no unqualified students being allowed to attend its cliniques and classes. The school is held at the Seamen's Hospital, Greenwich, with which are affiliated for teaching purposes the Royal Waterloo Hospital for Children and Women, the Bethlem Hospital, and the General Lying-In Hospital, all within the South-Eastern district. The Dreadnought Hospital is situated at Greenwich, and contains 250 beds, which are continually occupied by patients suffering from every variety of disease. It provides annually for 2,000 in-patients and 19,000 out-patients. The out-patient department at the Dreadnought Hospital is supplemented by the Society's dispensaries in the East India Dock Road, and at Gravesend, at which the present annual attendance is approximately 4,000 patients. Out-patient cliniques are held in surgery, medicine, and the special departments every morning; whilst in the afternoons ward cliniques are given in medicine, in surgery, and in one of the special departments. Operations are performed daily. The fee for attendance on the ordinary practice of the hospital provides for admission to the wards, operating-theatres, post-mortem rooms, out-patient rooms, and cliniques. Most of the practical clinical classes, such as those in laryngology, ophthalmology and dermatology are included in the fee for Clinical Teaching, but may be omitted if desired. Other practical classes, such as operative surgery and pathology, are arranged each session. The hospital is reached from London in a few minutes by rail and electric tramway.

The following are some of the principal provincial hospitals having the greatest number of beds, to which students are admitted, where clinical instruction can be obtained, but to which there is no medical school attached :—

Bath Royal United Hospital, Bath.—This hospital contains 130 beds and possesses an extensive library. Considerable alterations and re-arrangements are contemplated in the out-patient department during the coming year, and also a complete installation of heating by hot water.

Royal Berkshire Hospital.—The town of Reading, in which this hospital is situated, has a very large working-class population, and excellent opportunities for clinical instruction in the wards and extensive out-patient department are afforded here. This hospital, which contains 188 beds, has been recently enlarged, and there is also a splendid library, in which the Reading Pathological Society holds its meetings.

Bradford Infirmary.—The hospital contains 210 beds. Non-resident pupils are received and abundance of clinical material is obtainable in all the special departments of Medicine and Surgery. One year's attendance is recognised by the Examining Boards. Fee, perpetual, £10 10s.

Royal Devon and Exeter Hospital, Exeter.—This hospital contains 200 beds (including special children's wards), and numbers on its staff several well-known names; has a good library. Attendance on the practice of this hospital qualifies for all the examining boards, and students can attend Midwifery on application to the House Surgeon. Arrangements may also be made by which practitioners may have the use of the museum and library, and other facilities.

Leicester Infirmary is duly recognised by the various examining bodies, and contains 230 beds, and at the Children's Hospital in connection, 42. A new wing containing 100 beds has recently been added, together with a new Nurses' Home.

Liverpool.—The principal hospitals in this city, four in number, now form a combination for teaching purposes, in connection with the Liverpool University. These are referred to in another column, under "Universities," and are the Liverpool Northern Hospital, the Royal Southern Hospital, the Royal Infirmary, the Stanley Hospital, together with five special hospitals, the whole containing a total of 1,127 beds.

The Liverpool Skin Hospital and Extra-Mural School of Dermatology, in Pembroke Place, has eight beds and an Out-patient Department where over two thousand different patients are registered annually, and is open to Senior Students and Practitioners of Medicine. There is an excellently equipped "Light" Department where instruction is given in X-Ray and Finsen Light Therapy, and attached to the Hospital is a Museum of Dermatology. Terms for private instruction, 10 guineas per month. Dr. Stopford Taylor will give a course of twelve demonstrations, commencing September 14th. Fee for the course, 1½ guineas.

Norfolk and Norwich Hospital.—This hospital is recognised by the Colleges, and contains 230 beds. Fees, £10 10s. for six months, £15 15s. for twelve months' medical and surgical practice. Pupils, resident and non-resident, are admitted.

North Staffordshire Infirmary, Hartshill, Stoke-on-Trent.—This institution is built on the pavilion plan, and has accommodation for 216 patients, including children's wards, women's wards, and a special department for the treatment of diseases of the eye, so that there are excellent facilities here for acquiring a practical knowledge of the profession.

Nottingham General Hospital.—As a large commercial and industrial centre, Nottingham boasts of a large general hospital and several special institutions. The General Hospital contains 254 beds, and is staffed by several well-known physicians and surgeons. The practice is open to qualified members of the profession, and house appointments obtained hereat yield valuable material for study, especially in the direction of accidental injuries.

The Royal Sussex County Hospital, Brighton.—This hospital possesses about 196 beds, as well as a large out-patient department, and a well-appointed clinical research and bacteriological department. Hospital practice may be gained here for a period not exceeding two years on payment in advance of a fee of 20 guineas. There is also an excellent library attached.

Wolverhampton and Staffordshire Hospital.—This is one of the largest hospitals in the Midlands, and contains 212 beds. Situated as it is in the centre of the great coal and iron industries, it affords ample material for clinical study, and as the Hospital is recognised by the Royal Colleges, and has an excellent staff, its position is excellent.

For further particulars see Advertisements:—

Universities:	
University of Durham ...	44
University of Manchester ...	45
University of Birmingham ...	44
University of Liverpool ...	40
University of Bristol	46
University of Leeds	43
University of Sheffield ...	46
University of Wales	43
Medical Schools:	
St. Bartholomew's Hospital...	41
Charing Cross Hospital ...	41
London Hospital	42
St. Mary's Hospital	39
St. George's Hospital... ...	40
Middlesex Hospital	39
University College	39
Women's Medical School ...	38
Liverpool School of Tropical Medicine	43
Special Hospitals:	
Royal Dental Hospital ...	41
National Dental Hospital ...	42
Central Throat Hospital ...	39
Queen Charlotte Hospital ...	38
Post-Graduate Institutions:	
North-East London	43

Ireland.

THE IRISH MEDICAL SYSTEM.

The system of medical teaching in Ireland differs from that in England in important particulars. In London each clinical hospital has its attached medical school, fully equipped, which educates the students of that hospital and very seldom those of any other. In Dublin, on the contrary, the hospitals and schools are entirely separate (except that Sir Patrick Dun's Hospital is officially connected with Trinity College), and a student of any school is free to enter for the whole or any part of his course at any school or hospital he pleases.

COST OF MEDICAL EDUCATION IN IRELAND.

The cost of obtaining a medical qualification depends to some extent on the qualification sought. In this connection the following tables may be of use to the prospective student:—

COST OF MEDICAL EDUCATION.

School of Physic, Dub. Univ. ..	£122 17s.
Royal College of Surgeons School	£124 19s.
University Colleges	About £125.
Queen's University, Belfast ..	£105

COST OF DIPLOMAS OR DEGREES.

Dublin University	£27 (to this must be added £83 4s., the cost of obtaining an Arts degree).
National University	£25.
Queen's University, Belfast ..	£19 19s.
Conjoint Royal Colleges ..	£42.
Apothecaries' Hall	£22 1s.

Thus, the absolute payment will amount to somewhere between £125 and £233 1s. according to the course chosen. For the Conjoint Colleges the entire cost is £166 19s., taking the minimum mode of payment. So that, assuming that extras or voluntary costs are incurred the total will vary, say, from £170 to £200. "Grinding," although not officially recognised, occupies a position similar to that of the extra-mural instruction of other schools. Its cost must be reckoned among the expenses of the course, for, while not essential, it has become customary for almost all students to obtain aid in their studies in this way. As a rule, this private instruction costs about £5 5s. for each of the four examinations.

The above sum, or something like it, may be expended by the student or his parent in paying for lectures, &c., and examination fees as they fall due, and there is no difficulty in obtaining the needful information for his guidance if he likes to pay for his course in this fashion.

All the schools require fees for each course to be paid in advance.

Women are admitted to all the courses, degrees, and licences on the same terms as men.

DATE OF ENTRY.

The entry of names and commencement of study in Ireland is *supposed* to date from the 1st of October in each year, but entries are accepted up to the end of that month, or in some schools even later. It should be remembered that no credit is given for studies or attendance until the entry is regularly made. The student must attend three-fourths of the lectures delivered, and if he loses any time at the beginning he must make up for it afterwards by constant attendance.

The student begins work by attending a recognised medical school each morning at ten o'clock, and occupying his day, to five p.m., between lectures and dissections. His vacations are a fortnight at Christmas and a fortnight at Easter, and the academic year ends at the end of June.

PRELIMINARY EXAMINATIONS.

The first act of the student is to pass a preliminary examination, without which he cannot get credit for any medical studies pursued. The next is to commence medical study. This he does by entering for lectures at a medical school. From the school registrar he gets a form of certificate, and his third act is to take it or send it to the Branch Medical Council, 35 Dawson Street, Dublin, unless, as is usually the case, this duty is undertaken for him by the school registrar. He is thereupon placed upon the Register of Medical Students (without fee), and his period of study counts from that date. He must register at the earliest possible moment, or he may lose credit for his work.

The only preliminary examination held specially for medical students is that held conjointly by the Royal Colleges of Physicians and Surgeons, but other examinations—*e.g.*, the public entrance at Trinity College, the matriculation of the National and Queen's Universities, the Intermediate Examination passes in the required subjects, and certain other examinations recognised by the General Medical Council, are accepted as equivalent.

The subjects of examination as prescribed by the General Medical Council are as follows:—1. English language, including a specified author, dictation, grammar, and composition; also parsing and analysis from a book specified. 2. Latin, including grammar, translation from specified authors, and translation of easy passages not taken from such authors. 3. Elements of mathematics, comprising (*a*) arithmetic, including vulgar and decimal fractions; (*b*) algebra, including simple equations; (*c*) geometry, Euclid, Books I., II., and III., with easy deductions. 4. One of the following optional subjects:—(*a*) Greek, (*b*) French, (*c*) German.

THE IRISH LICENSING BODIES.

The Medical Licensing Bodies of Ireland are five in number, and, as a rule, students will gravitate into one or other of six classes:—*a.* Those who enter Trinity College, and take a full graduation in Arts in addition to their professional degrees. *b.* Those who take the conjoint licence of the Royal Colleges of Physicians and Surgeons. *c.* Those who take their qualifications at the National University of Ireland, where graduation in Arts is not necessary. *d.* Those who enter Queen's University, Belfast, and take their course and degrees there. *e.* Those who take the licence of the Apothecaries' Hall. *f.* Those who pursue their studies in Ireland, but who migrate to London, Edinburgh, or Glasgow for their licences.

We do not attempt to give details as to the requisite courses of instruction for degrees or diplomas, as our epitome must necessarily be insufficient for the information of the student, and we can occupy our available space with information more useful to him. The official information upon which students may depend can be obtained by sending a note to the Registrars of the Licensing Bodies or Schools.

THE UNIVERSITY OF DUBLIN.

The University of Dublin grants the degrees of M.B., B.Ch., and B.A.O. to students who have obtained their B.A. degree, and who have been for at least five academic years on the books of the Medical School, and the higher degrees of M.D., M.Ch., and M.A.O. to graduates of certain standing who hold the degrees of M.B., and B.Ch. It does not grant degrees to any but graduates in Arts, and consequently its degrees hold a high rank, and are sought for by those who look forward to occupying the best positions in the profession.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O. is approximately as follows:—Lectures, £67 4s. 0d.; Hospitals, £55 13s.; Degree Fees, £27.—Total, £149 17s. 0d.

The expense of the B.A. degree, amounting altogether to £83 4s., should be added, making the total cost £233 1s. 0d.

Diploma in Medicine, Surgery, and Midwifery.—Candidates for the diplomas in Medicine, Surgery, or Obstetric Science must be matriculated in Medicine, and must have completed two years in Arts and five years in medical studies. The medical course and examinations are the same as for the degrees. Fees for the diplomas in medicine, surgery, and midwifery, £21. A diplomate, on completing his course in Arts and proceeding to the degree of B.A., may become a Bachelor of Medicine on paying the degree fees.

In addition to its ordinary qualifications the University grants the following degrees and diplomas:—

Doctor of Medicine.—To obtain this the candidate must have passed the final examinations, and be of M.A. standing. He must then read a thesis before the Regius Professor of Medicine. Fee for this degree, £13.

Master of Surgery.—The candidate must be a Bachelor in Surgery of three years' standing, and must then pass an examination in clinical surgery, operative surgery, surgical pathology, surgery, and surgical anatomy (on the dead subject). Fee for this degree, £11.

Master in Obstetric Science.—The candidate must have passed the M.B. and B.Ch. examinations, and have completed, in addition to the courses for M.B., B.Ch., a course of obstetric medicine and surgery. He is then required to pass an examination in the following subjects:—Practice of midwifery, gynæcology, anatomy of female pelvis and elementary embryology, and clinical gynæcology. Fee for this degree, £5.

Diploma in Public Health.—The candidate must be a Registered Medical Practitioner; must have completed, subsequent to obtaining a registrable qualification, four months' practical instruction in a laboratory in practical work in chemistry and bacteriology applied to public health; he must have studied practically outdoor sanitary work for six months under an approved officer of health; and have attended, after qualification, for three months, the practice of a hospital for infectious diseases.

Degrees in Dental Science.—Candidates for the B.Dent.Sci. degree in dental science must have taken a degree in Arts, and must have had their names in the books of the Medical School for four years. Three examinations must be passed—namely, the Preliminary Scientific at the end of the first year, the Intermediate at the end of the third year, and the Final Dental at the end of the fourth year. The total fees are £280 2s.

QUEEN'S UNIVERSITY, BELFAST.

The Queen's University confers the degrees of M.B., B.Ch., and B.A.O., on students who have followed the prescribed course of studies for five academical years, and passed the prescribed examinations. At least three of the years are spent in attendance on courses at the University. The expense is about £105.

Degrees of M.D., M.Ch., and M.A.O.—These degrees are not conferred until the expiration of at least three academic years, or, in the case of graduates of the University in Arts or Science, of at least two academic years, after admission to the primary degrees in the Faculty of Medicine. Every candidate must show that in the interval he has pursued such courses of study, or been engaged in such practical work as may be prescribed. These degrees may be conferred by the Senate either (*a*) after an examination, which includes written, oral, clinical, and practical examinations; or (*b*) on the submission of a thesis or other evidence of original study or research, to be approved by the Faculty of Medicine, after an oral or other examination of the candidate on the subject thereof. On application for these degrees a fee of £2 2s., and on admission to them a fee of £8 8s., must be paid.

The subjects of the examination for the degree of M.D. are:—The Principles and Practice of Medicine, and one other special subject to be selected by the candidate from: (i.) Human Anatomy, including Embryology; (ii.) Physiology; (iii.) Pathology; (iv.) Pharmacology and Therapeutics; (v.) Sanitary Science and Public Health; (vi.) Forensic Medicine and Toxicology; (vii.) Mental Diseases.

The subjects of the examination for the degree of M.Ch. are:—(1) Surgery, Theoretical and Practical, including Ophthalmology and Otology. (2) Surgical Pathology. (3) Surgical Anatomy and Operative Surgery, with the use of surgical instruments and appliances.

The subjects of the examination for the degree of M.A.O. are:—(1) Midwifery. (2) Diseases of Women and Children. (3) Pathology in its special bearing on Midwifery, and Diseases of Women and Children.

Diploma in Public Health.—This diploma is given after examination to registered medical men, on similar conditions to those obtaining elsewhere.

NATIONAL UNIVERSITY OF IRELAND.

The National University of Ireland confers the degrees of M.B., B.Ch., and B.A.O., on students who have followed the prescribed course for five academic years, and passed the prescribed examinations. At least three years must be spent at one of the constituent colleges of the University, viz., the University Colleges at Dublin, Cork, and Galway. The University also confers the higher degrees of M.D., M.Ch., M.A.O., B.Sc. (Public Health), D.Sc. (Public Health), B.D.S., and M.D.S.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O., is approximately:—Lectures, £68 5s.; Hospitals, £56 14s.; University Fees, £19. Total, £143 19s.

The conditions for the higher degrees are:—

Doctor in Medicine.—Candidates may present themselves for the examination for this degree after an interval of three academical years from the time of obtaining the M.B., B.Ch., B.A.O. degrees; but in the case of candidates who have obtained a degree of the University in the Faculty of Arts, an interval of two academical years is sufficient.

Candidates must at the same time produce a certificate of having been, for at least two academical years, engaged in hospital or private medical, surgical, or obstetrical practice respectively, or in the military or naval medical service.

Candidates at this examination must answer in Medicine and Pathology.

The examination in each subject consists of:—

(*a.*) A Written Examination.
(*b.*) An Oral Examination.

In addition every candidate must diagnose at the bedside at least three medical cases, and prescribe treatment. He must also write detailed reports on at least two cases, to be selected by the examiners, and discuss the questions arising thereon. Fee, £10.

Master in Surgery.—The following are the subjects of examination:—

Surgery, theoretical and practical, including Ophthalmology and Otology; Surgical Pathology; Surgical Anatomy and Operative Surgery, with the use of Surgical Instruments and Appliances.

The other conditions are the same as for the M.D. degree. Fee, £10.

Master in Obstetrics.—Academic standing is as for the two previous degrees.

Each candidate must furnish satisfactory evidence that since graduating in medicine he has (1) had personal charge of at least *twenty* cases of labour; and (2) attended during a period of three months the practice of a clinical hospital for diseases of women, where at least six beds are in constant occupation, or in a special ward of a general hospital, where such cases only are treated, and containing at least six beds in constant occupation.

Candidates at this Examination must answer in the following subjects:—Midwifery, Diseases of Women and Children, Pathology, the Use of Instruments and Appliances. The Examination in each subject consists of—(*a*) an Oral Examination, with practical illustrations, including use of instruments and appliances; (*b*) a written Examination; (*c*) a clinical Examination, as far as practicable. Fee, £10.

Bachelor of Science, Public Health.—A candidate shall not be admitted to receive the Degree of Bachelor of Science, Public Health, unless he—(*a*) shall have received the Degrees of M.B., B.Ch., and B.A.O. at least one year previously; (*b*) shall have pursued an approved course of study in the Faculty of Medicine; and (*c*) shall have passed the prescribed examination. Fee, £7.

Courses.—In addition to D.P.H. Course:—(1) Special Pathology (three months). (2) Bacteriology, second course (three months). (3) Advanced Course in Hygiene (three months).

Doctor of Science, Public Health.—The regulations are not yet published. Fee, £10.

Diploma in Public Health.—This Diploma may be granted to matriculated students of the University who shall have completed courses of study, approved for the purpose, and shall have passed the prescribed examinations: provided that it shall not be granted except to a registered medical practitioner.

The conditions and examination are similar to those already quoted for the University of Dublin.

Degrees in Dentistry.—Candidates for the Degree of B.D.S. shall be required to pass, after matriculation, four University Examinations, namely:—A First University Examination in Medicine, as for medical students; a Second University Examination in Medicine, as for medical students; an Intermediate University Examination in Dental Surgery; a Final Examination for the Degree of B.D.S.

Students must follow a definite course of instruction, and must be, for at least two years, apprenticed to a registered dentist.

The regulations for the degree of M.D.S. are not yet published.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

Examinations are held conjointly by the two Colleges. The course, as in other bodies, extends over five years, with examinations at the end of the first, second, third, and final years. These examinations are conducted by examiners chosen by each of the Colleges for the subjects appropriate to them. The curriculum has recently been revised, and made of a more practical nature. As in the English Colleges, the subjects of the First Professional Examination may be studied either at a medical school or at an institution other than a medical school which is recognised by the Colleges, after due inspection, for instruction in these subjects. We recommend students to apply for the official programme to the Secretary of the Committee of Management, Royal College of Surgeons, or to the Registrar of either College. In the case of the Preliminary Examination seven clear days' notice must be given to the Secretary; fourteen days' notice is required from candidates for the Professional Examinations.

The total of the examination fees, spread over the four examinations, is £42, while the school and hospital fees, if taken in Dublin, amount to £124 19s., making altogether £166 19s., exclusive of re-examination fees, which have to be paid in case the candidate fails to pass his examination.

The Colleges also confer a Diploma in Public Health, of which information will be found on page lvi

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.

This College issues a Licence in Medicine and a Licence in Midwifery to registered medical practitioners.

Licence in Medicine.—The subjects of examination are:—Practice of Medicine, Clinical Medicine, Pathology, Medical Jurisprudence, Midwifery, Hygiene and Therapeutics.

Licence in Midwifery.—The subjects of examination are:—Gynæcology and Midwifery. A Registered Medical Practitioner of five years' standing is exempted from the examination by printed questions.

Fees.—Fee for the Licence to Practise Medicine, £15 15s. Fee for the Licence to Practise Midwifery, £5 5s.

Membership.—The Membership is open to University Graduates in Medicine and to Licentiates of the Royal Colleges of Physicians of the United Kingdom. The Examinations for Membership are held in January, April, July, and October, and such other times as the President may appoint. Fee to Licentiates of the College, £21, to others £36 15s.

Fellowship.—Fellows are elected from among the members of at least one year's standing. Fee £60.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

This College grants a Licence in Surgery to registered medical practitioners.

The subjects, methods, times, and places of examination are those of the surgical group of the Final Professional Examination of the Conjoint Board in Ireland of the Royal College of Physicians and the Royal College of Surgeons. (See their regulations.) Candidates must pass in all the subjects at one examination. Special examinations will not be granted under any circumstances.

A candidate whose name is entered either on the Medical Register for the United Kingdom, the Colonial Medical Register, or the Foreign Medical Register of the year in which he presents himself for examination, and who satisfies the Council that he has passed through a course of study and examinations equivalent to those required by the regulations of the Conjoint Board of the Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland, preceded by the passing of an examination in Arts recognised by the General Medical Council, may, at the discretion of the Council, be admitted to the examination.

Candidates are required to lodge their applications, declarations, and certificates with the Registrar, at least twenty-one days before the date of the examination.

The fee for examination is for each admission five guineas. Of these fees five guineas will be reckoned as part of the fee payable upon admission to the Licence in Surgery. The fee to be paid upon admission to the Licence in Surgery is twenty-five guineas.

Fees will not be returned under any circumstances.

All applications with reference to the examination for the Licence in Surgery should be addressed to the Registrar, Royal College of Surgeons in Ireland, Dublin.

Fellowship.—The examination for the Fellowship is divided into two parts,—viz.: The Primary and the Final. The subjects of the primary examination are—anatomy, including dissections, physiology, and histology. The examination is partly written, partly *viva voce*, and partly practical. Candidates must pass in all the subjects at one examination. The subjects of the final examination are—Surgery, including surgical anatomy, and pathology. The examination is partly written, and partly *viva voce*, and includes the examination of patients, and the performance of operations on the dead body. Candidates must pass in all the subjects at one examination. The examinations are held three times in each year, commencing :—The primary on the first Monday in March, the third Monday in July, and the third Monday in November. The final on the second Monday in March, the third Wednesday in July, and the fourth Monday in November. Special examinations will not be granted under any circumstances. Candidates are required to lodge their applications, certificates, and receipts for fees with the Registrar, at least seven days before the date of the examination.

Fees.—1. The fees for examinations are as follows :—Primary examination, each admission, 5 guineas ; final examination, each admission, 5 guineas. 2. Of these examination fees ten guineas will be reckoned as part of the fee payable upon admission to the Fellowship. 3. The fee to be paid upon admission to the Fellowship is forty guineas, except when the candidate is a Licentiate of the College, in which case the fee is twenty-five guineas.

All applications with reference to the examinations for the Diploma of Fellow should be addressed to The Registrar, Royal College of Surgeons in Ireland, Dublin.

Licence in Dental Surgery.—Candidates for the licence in Dental Surgery are required to pass two professional examinations. They must have passed a recognised Preliminary Examination in general education, and been registered as medical or dental students by the General Medical Council. They must have been engaged during a period of two years in acquiring a practical familiarity with the details of mechanical dentistry under the instruction of a registered dentist, or under the direction of the superintendent of the mechanical department of a recognised dental hospital where the arrangements for teaching mechanical dentistry are satisfactory to the Council of the College. This instruction may be commenced or attended before the candidates register as medical or dental students. They must have been engaged during four years in the acquirement of professional knowledge subsequently to the date of registration as a medical or dental student. One year's *bona fide* apprenticeship with a registered dental practitioner, after being registered as a medical or dental student, may be counted as one of the four years of professional study. Candidates must produce evidence of having followed a prescribed course of study. There are special exemptions in the case of persons already holding a surgical or dental qualification. All applications with reference to the examination for the Diploma in Dental Surgery should be addressed to The Registrar, Royal College of Surgeons in Ireland, Dublin.

APOTHECARIES' HALL OF IRELAND.

The Licence of this Hall is granted to students who present certificates of having completed the course of study as laid down in the curriculum, and who pass the necessary examinations. The diploma of the Apothecaries' Hall of Ireland entitles the holder to be registered as a practitioner in medicine, surgery, and midwifery, and possess the privileges of an apothecary.

There are three professional examinations, the total fees for which amount to thirty guineas. Women are eligible for the diploma.

Registered medical practitioners receive the diploma of the Hall upon passing an examination in the subject or subjects not covered by their previous qualification, and on paying a fee of fifteen guineas.

The fees payable for each examination are as follows : Professional Primary, £5 5s. ; Intermediate, £10 10s. ; Final Examination, £15 15s.

Applications and schedules, together with bank receipt for the fee, must be lodged with the Registrar, Apothecaries' Hall, 40 Mary Street, Dublin, at least fourteen clear days before the day of examination.

Each candidate before receiving his diploma must produce evidence that he has attained the age of 21.

Each candidate must produce evidence of having before entering on medical studies passed a preliminary examination in general education.

The details of the course of education required and syllabus of the examinations will be supplied on application to the Registrar at 40, Mary Street, Dublin.

THE DIPLOMA IN PUBLIC HEALTH.

This diploma is granted by Dublin University, the National University, Queen's University, and the Conjoint Royal Colleges. Every candidate must be a registered medical practitioner. The examination is in :—(1) Chemistry (including chemical physics). (2) Engineering and architecture. (3) Sanitary law and vital statistics. (4) Hygiene. (5) Bacteriology. (6) Meteorology. The General Medical Council recommend that all candidates shall have studied in a special bacteriological laboratory, also for six months as pupil of a working medical officer of health, described, for Ireland, as " the medical officer of health of a county or of one or more sanitary districts having a population of not less than 30,000 ; or a medical officer of health who is a teacher in Public Health of a recognised medical school."

THE IRISH MEDICAL SCHOOLS.

The Irish Medical Schools are as follows :—

The School of Physic of Dublin University.—Every student of the school must be matriculated in Medicine, for which a fee of 5s. is payable, but he need not attend any of the Arts courses unless he desires to obtain a University licence or degree in medicine, surgery, and midwifery. No student is permitted to matriculate unless he has passed the Entrance Examination of Trinity College, or some other examination recognised by the General Medical Council. Two medical scholarships are given annually at the School of Physic, value £20 per annum, tenable for two years, the examinations for which are held each year in June ; one scholarship is given in anatomy and institutes of medicine ; the other in zoology, chemistry, botany, and experimental physics. A prize of £100 is awarded by the Board to the successful candidate at a special examination in alternate years in medicine or in surgery, provided that the merit be deemed sufficient. The successful candidate is required to spend three months in the study of medicine or surgery, as the case may be, in Berlin, Paris, or Vienna. Before he can obtain the first instalment of £50 he must satisfy the Senior Lecturer that he possesses sufficient knowledge of a Continental language to derive full benefit from the prize. The examination is held in June, and is open to students who have passed the Final Examination in Medicine or in Surgery, as the case may be, within two years of the examination.

In order to obtain the second sum of £50 the prizeman must have furnished to the Regius Professor his formal report on the hospitals attended by him within two years from the time of obtaining the prize.

The Sir John Banks Medal and Prize, founded by the late Sir J. Banks, M.D., formerly Regius Professor of Physic, are awarded to the best and second best answerers at the Medical Travelling Prize Examination.

The Edward Hallaran Bennett Medal and Prize, founded by pupils of the late Dr. E. H. Bennett, formerly Professor of Surgery, are awarded to the best and second best answerers at the Surgical Traveling Prize Examination.

Class prizes are given at the end of the session of between £5 and £10 in value. The John Mallet Purser Medal, founded by Prof. Purser's past pupils, is awarded annually to the student who, at the ordinary June Intermediate Medical Examination, Part I., in Anatomy and Institutes of Medicine, obtains highest marks in Physiology and Histology, provided that he passes the examination in full, and the Cunningham Medal, *in memoriam* of the late Prof. D. J. Cunningham to the student, who, at the same examination, obtains highest marks in Anatomy, and passes the examination.

Fitz-Patrick Scholarship.—This scholarship consists of the interest on £1,000. It is awarded annually to the student who obtains the highest aggregate marks at the five sections of the Final Examinations, provided that he has completed his medical course in the prescribed period of five years.

A School of Dental Science has been organised in connection with the School of Physic in Trinity College. Lectures are given in anatomy, chemistry, surgery physics, physiology and histology, dental mechanics, orthodontia and anæsthetics.

Post-Graduate Classes.—A short post-graduate course is now given annually in September in connection with Trinity College Medical School. It includes special work on Diseases of the Eye, Nose, and Throat, Gynæcology, Diseases of the Skin, X-ray work, Medicine, Surgery (clinical and operative), and Clinical Pathology.

The Royal College of Surgeons in Ireland. Schools of Surgery.—These schools are attached by Charter to the Royal College of Surgeons, and have existed as a department of the College for over a century. They are carried on within the College buildings, and are subject to the supervision and control of the Council. The buildings have been reconstructed, the capacity of the dissecting room nearly trebled, and special pathological, bacteriological, public health, chemical, and pharmaceutical laboratories fitted with approved appliances, in order that students may have the advantage of modern methods of instruction. There are special rooms set apart for women students.

All the lectures and courses of practical instruction may be attended by medical students who are otherwise unconnected with the College.

All the diplomas of the College are open to students of either sex. Separate rooms have been provided, and careful provision made for the instruction and comfort of women students.

Prizes.—The Barker Prize, £26 5s.; the Carmichael Scholarship, £15; the Mayne Scholarship, £8. The Gold and Silver Medals in Surgery and the Stoney Memorial Gold Medal in Anatomy.

Class Prizes of £2 and £1, accompanied by silver medals if sufficient merit is shown, will also be given in each subject. Prospectus and Student's Guide can be obtained on application to the Registrar, Royal College of Surgeons, Dublin.

University College, Dublin.—This College is a constituent college of the National University of Ireland, for whose examinations and degrees it trains students. The examinations are conducted by the professors in the College, in conjunction with extern examiners appointed by the University.

Medical students must be registered with the Branch Medical Council at the commencement of their period of study. Forms of application can be obtained and filled up in the College. Information in respect of the necessary conditions for registration may be obtained from the Registrar of the College at the Medical School. The student must bring with him the certificate of his Matriculation examination, or of the Senior Grade examination of the Intermediate Education Board in the necessary subjects, and his birth certificate. Non-matriculated students intending to study medicine must have passed a Preliminary Examination, accepted by the General Medical Council, in English, Latin, Mathematics, and a Modern Language or Greek. Intending medical students who, for any reason, cannot begin the study of Medicine in the Winter Session, may do so in the Summer Session, but will not be able to complete the lectures of the first medical year until the following Winter Session.

The Scholarship Regulations provide for Six Scholarships of £30 each, tenable for one year in each of the 2nd, 3rd, 4th and 5th years of study. The Examinations for the Scholarships are held in October, the subjects being those studied in the previous year which Candidates must have attended in the College. Scholarships tenable for one year are offered at entrance at an Examination common to all Faculties.

There are Exhibitions of the value of £20 and £10 offered to students of the College at each of the Medical Examinations of the University; and a Gold Medal to the most distinguished answerer at the M.B., B.Ch., and B.A.O. Examination of the year.

Courses of lectures in Dental Surgery and Dental Mechanics are given to Dental students.

The Queen's University of Belfast.—This University provides all the classes required for a complete medical curriculum. The University contains laboratories in connection with the departments of Biology, Chemistry, Physiology, Pathology, Anatomy, Physics, and Materia Medica. In connection, too, is a Students' Union, which gives students the advantage of dining-rooms, reading-rooms, a library, and various recreation rooms. Women are eligible as students. Clinical instruction is given at the Royal Victoria Hospital, which was rebuilt a few years ago, and has 300 beds, and at the Mater Infirmorum Hospital, which has 160 beds. Other hospitals open to the students of the University are: The Maternity Hospital, the Ulster Hospital for Women and Children, the Hospital for Sick Children, the Ophthalmic Hospital, the Benn Ulster Eye, Ear, and Throat Hospital, the Union Infirmary and Fever Hospital, the Fever Hospital, Purdysburn, and the District Lunatic Asylum.

Scholarships.—(1) Twelve Entrance Scholarships, value £40, open to students of Art, Science and Medicine; (2) two Dunville Studentships (one each alternate year), value £150 each; (3) one Andrews Studentship each alternate year, value £145; (4) numerous sessional prizes.

Sixteen scholarships, value £15-£40, are now open for competition at the medical examinations in March and June. There is also a Post-Graduate Research Fund open to all graduates of not more than three years' standing. Information regarding these scholarships, etc., may be obtained on application to the Secretary of the University.

Fees.—The cost of the curriculum intended for students proceeding to the degrees of the Queen's University of Belfast is, approximately, £105. This includes examination fees and a perpetual ticket for attendance at the Royal Victoria Hospital or the Mater Infirmorum Hospital, but not fees for the special hospitals.

A pamphlet containing full information regarding the new regulations for courses, fees, etc., can be had free of cost on application to the Secretary, Queen's University, Belfast.

The University Colleges—Cork and Galway.—These important academic institutions educate students for all degrees and licenses, and are maintained, as hitherto, by Government grants. Various exhibitions and scholarships are available. Each college has the disposal of about £1,500 per annum in scholarships and prizes. The colleges are equipped with students' reading rooms and lending libraries and refreshment rooms, and with all adjuncts to collegiate life, such as literary societies and athletic organisations. The expense of living in the collegiate towns is quite moderate. The scholarship examinations are held in October.

These Colleges are now constituent colleges of the National University of Ireland, and conduct examinations admitting to its degrees.

University College, Cork.—The arrangements in the Faculty of Medicine are made chiefly with reference to the requirements of the National University of Ireland, but students proceeding for the examinations of the Conjoint Boards of England, Scotland, or Ireland, can arrange the course of lectures which they attend, and the order in which they attend them, to meet the requirements of those bodies. Certificates of attendance in the college are also accepted by the University of London. The total fees for the college lectures and hospital attendances required by the National University of Ireland are about £104.

Clinical instruction is given at the North and South Infirmaries and at the Cork Union Hospital. Students can also attend the Mercy Hospital, the County and City of Cork Lying-in Hospital, the Maternity Hospital, the Hospital for Diseases of Women and Children, the Fever Hospital, the Ophthalmic and Aural Hospital, and the Eglinton Lunatic Asylum. The winter session commences on October 1st, and ends at the end of April. The courses of the summer session are delivered in the months of April, May, and June.

Between forty and fifty scholarships open to Medical Students are awarded annually (values £20-£50), as well as the Blayney Scholarship. This Scholarship, worth about £32, will be awarded to the candidate obtaining the highest marks in Honours at the M.B., B.Ch., B.A.O. Examination, held in Autumn at the College.

Further information can be obtained in the College Regulations, or on application to the Registrar, University College, Cork.

University College, Galway.—Clinical teaching is carried on in the Galway Hospital, established as a Public General Hospital (in the place of the County Galway Infirmary) by Act of Parliament 1892. The Galway Fever Hospital and Galway Union Hospital are also open to students. The conditions of residence required by the National University for graduation may be observed in Galway. The lectures qualify for the other licensing bodies.

Prizes.—There are eight Junior Scholarships in Medicine of the annual value of £25 each. Two are tenable by matriculated students of the first, second, third, and fourth years respectively. There are, besides, private Foundation Scholarships open to medical students and tenable with medical scholarships. Sessional prizes are offered in each subject.

Like the sister college of Cork, this college is now a constituent college of the National University of Ireland.

ROYAL COLLEGE OF SCIENCE FOR IRELAND.

This College, situate in St. Stephen's Green, Dublin, supplies a complete course of instruction in science applicable to the industrial arts, especially those which may be cast broadly under the heads of Agriculture, Chemical Manufactures, Engineering, Physics, and Natural Science. A Diploma of Associate of the College is granted at the end of the three years' course. Non-associate students may join for any course required. There are several entrance scholarships, (*a*) in Agriculture, and (*b*) in Science and Technology, tenable for three years, of the value of £50 each yearly, with free tuition. There are four Royal scholarships of the value of £50 each yearly, with free education, tenable for two years. Two are competed for by the first year associate students at the end of each session. All the laboratories and drawing schools are open daily for practical instruction. The Science Scholarship Examinations are held during the first week in July, the Examinations for Agricultural Scholarships in the first week in September, and the Entrance Examination for intending Associates in the third week of September. For further particulars and copy of college programme apply to the Registrar.

THE DUBLIN HOSPITALS.

The clinical hospitals in Dublin are ten in number, exclusive of three lying-in hospitals. There are also two children's hospitals, an orthopædic hospital, a fever hospital, an ophthalmic hospital, a dental hospital, and other special institutions. Some of the clinical hospitals, though they have no actual or official connection with any school, are in close affinity with certain teaching bodies; while others, again, are without any special connection with any school. While, however, such association of school and hospital may exist, it should be remembered that the Dublin schools and hospitals are open to all comers, and the student is free to attend any hospital or any school he wishes, and to change his hospital from year to year as he may see fit.

The Irish licensing bodies require attendance on hospitals for twenty-seven months—*i.e.*, three winter sessions of six months and three summers of three months, within the five years of study. The fee at all general hospitals is £8 8s. in winter, and for the summer £5 5s., or £12 12s. for the entire session of nine months if taken together. All the Dublin hospitals receive students as residents.

GENERAL HOSPITALS.

Richmond, Whitworth, and Hardwicke Hospitals.—These hospitals contain over 300 beds. They are visited each morning at nine o'clock by the physicians and surgeons, and, in addition to the usual bedside instruction, clinical lectures are delivered on the most important cases. Instruction is also given on various special branches of medicine and surgery. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these hospitals. There are ophthalmic, aural, throat, and gynæcological dispensaries, and instruction in these important subjects is given. A modern pathological laboratory, and a new mortuary have been opened recently. Twelve resident clinical clerks are appointed each quarter, and provided with furnished apartments, fuel, &c. The appointments are open not only to advanced students, but also to those who are qualified in medicine and surgery. A house surgeon for the Richmond Hospital and a house physician for the Whitworth and Hardwicke Hospitals are elected every six months, and receive a salary. The Richmond Lunatic Asylum, containing 1,200 beds, adjoins the hospital.

Meath Hospital and Co. Dublin Infirmary.—This hospital was founded in 1753, and now contains 160 beds available for clinical teaching. A new building for the isolated treatment of fevers, containing 40 beds, has recently been added. The certificates are recognised by all the universities and licensing bodies of the United Kingdom. Medical and surgical resident pupils and clinical clerks and dressers are appointed every three months, and two house surgeons are elected annually. A prospectus giving the complete arrangements for medical and surgical classes for the coming session may be obtained from the Secretary of the Medical Board, Mr. Henry Stokes, F.R.C.S.I., 32, Upper Pembroke Street.

The Adelaide Medical and Surgical Hospitals occupy a central position within a few minutes' walk of the College of Surgeons and Trinity College. From October 1st, the physicians and surgeons visit the wards and give instruction at the bedside at the advertised hours. There is a large detached fever hospital, and there are wards for infants and children. Operations are performed, at 10 a.m. on Tuesday, Thursday, and Friday. Special hours are devoted to clinical instruction in the diseases peculiar to women; also special instruction is given on practical pathology and X-ray photography. Two House Surgeons are elected annually and four resident pupils half-yearly. Prize examinations for the Hudson Scholarship of £30 and a gold medal, and Hudson prize of £10 and a silver medal, and for surgical, medical and dermatological prizes, are held at the termination of the session. The large dispensaries afford facilities for the study of ear, throat, and cutaneous diseases, as well as of minor surgery and dentistry. Further particulars from Dr. H. T. Bewley, 89 Merrion Square.

The Royal City of Dublin Hospital.—This hospital has recently been enlarged and improved. A special course of instruction is given in ophthalmic and aural diseases. There are special wards for the treatment of diseases of the eye, of children, and of women, and practical instruction is given on diseases peculiar to women; there is also a separate building for infectious diseases. Clinical clerks to the physicians and dressers to the surgeons are appointed from the most deserving of the class. A new operation theatre, sterilising room, and anæsthetic room have been constructed in accordance with modern surgical requirements. A department for Röntgen-ray and light treatment of lupus has been added. A resident medical officer is elected annually, and resident medical and surgical pupils are appointed from among the past and present students of the hospital. Operations are performed on Tuesdays, Thursdays, and Saturdays, at 10 a.m. Special classes for first year students. Full particulars can be had on application to Hon. Sec. Med. Board.

Sir Patrick Dun's Hospital is situated on the south-eastern side of the city, and about a quarter of a mile from the University School of Physic. It is officered almost exclusively by the professors in that school. Formerly all University students were compelled to attend this hospital, which was purely a medical institution, but many years ago the obligation was removed, and the hospital was opened for surgical cases. It is now open to all students. There is a special wing devoted to fever cases, and regular clinical instruction is given by the members of the medical staff throughout the winter and summer sessions. Special classes for students commencing their hospital studies will be held in the wards during the months of October, November, and December. They will embrace the elements of medicine and surgery, including note-taking. Opportunities are also afforded to students for examining cases of throat, ear, and eye diseases, as well as for performing minor surgical operations and bandaging. In the X-ray Department opportunities are given the members of the hospital class of seeing the various applications of the X-rays to the diagnosis and treatment of injury and disease. Arrangements have been made for practical instruction in anæsthetics. A department for dentistry has lately been added.

*Mater Misericordiæ Hospital, Dublin.—This hospital, at present containing 345 beds, is open at all hours for the reception of accidents and urgent cases. Clinical instruction is given by the physicians and surgeons at 9 a.m. daily. A course of clinical instruction on fever is given during the winter and summer sessions. A certificate of attendance upon this course, to meet the requirements of the licensing bodies, may be obtained. Ophthalmic surgery is taught in the special wards and in the dispensary. Surgical operations are performed on Mondays, Tuesdays, Fridays and Saturdays at 11 o'clock. Connected with the hospital are extensive dispensaries, which afford valuable oportunities for the study of general medical and surgical diseases and accidents. Instruction is given in pathology and bacteriology. Three house physicians, six house surgeons, and 16 resident pupils are elected annually. Dressers and clinical clerks are also appointed, and certificates are given to those who perform their duties to the satisfaction of the staff. Leonard Prizes are offered for competition annually. For further particulars see prospectus. Certificates of attendance upon this hospital are recognised by all the universities and licensing bodies in the United Kingdom. A training school and a home for trained nurses have been opened in connection with the Hospital.

Terms of attendance.—Nine months, £12 12s.; six winter months, £8 8s.; three summer months, £5 5s. Entries can be made with any of the physicians or surgeons, or with the Registrar, Dr. Martin Dempsey, 35 Merrion Square. A prospectus containing in detail the arrangements for clinical instruction, prizes, etc., may be obtained from the Secretary, Medical Board.

Mercer's Hospital.—This hospital, founded in 1734, is situated in the centre of Dublin, in the immediate vicinity of the Schools of Surgery of the Royal College of Surgeons, the National University School of Medicine, and Trinity College. It contains 120 beds for medical and surgical cases, and arrangements have been made with the medical officers of Cork Street Fever Hospital whereby all students of this hospital are entitled to attend the clinical instruction of that institution. There is a large out-patient department, and a special department for diseases peculiar to women. There are also special wards for the treatment and study of children's diseases. During the past few years the hospital has undergone extensive alterations in order to bring it up to modern requirements. A house surgeon is appointed annually. Five resident pupils are appointed, each for six months, and clinical clerks and dressers are appointed monthly from among the most deserving members of the class. The certificates of this hospital are recognised by all the licensing bodies. For further particulars apply to Mr. Seton Pringle, F.R.C.S., 7, Fitzwilliam Place, Dublin.

St. Vincent's Hospital was established in 1834. It has 160 beds, and in connection with it there is a largely attended dispensary, and a nurses' institute. In addition to the ordinary clinical instruction, systematic courses of lectures are given in each department of medicine and surgery, and are illustrated by cases in the hospital. The resident officers consist of two house surgeons, two house physicians, and six resident pupils. Three clinical lectures are delivered daily in the wards, illustrated by selected cases, and beginning at 9 a.m. Two gold medals and other valuable prizes and certificates of merit are awarded at the end of each session. A prospectus can be had from Mr. Kennedy, 68 Merrion Square.

*Dr. Steevens' Hospital, situated at Kingsbridge, is one of the oldest and largest clinical hospitals in Dublin, and contains over 200 beds. A new dispensary and out-patient department has been completed and opened to patients. There is accommodation for twelve resident pupils—four medical, six surgical, and two in the special departments, each of whom is supplied with a separate room. All information with regard to these appointments can be had from the Resident Medical Officer at the hospital. Licensing bodies recognise six months' residence as equivalent to a year's ordinary attendance at hospital. The manufactories and railway works in the neighbourhood supply this hospital with large numbers of accidents and other cases, while a special ward for venereal disease affords exceptional opportunities for the study of this important subject.

Jervis Street Hospital is the oldest established in Dublin. The present building was completed in 1896, since which time it has been open for the reception of patients. In addition to large medical and surgical dispensaries, the new out-patient department which is now completed, includes special, departments for the treatment of diseases of the skin, eye, ear, and throat, and diseases peculiar to women. Six resident surgeons are appointed annually. Clinical clerks and surgical dressers are selected from among the most attentive of the advanced students without the payment of any additional fee. Twelve resident students are appointed annually. Special certificates are given to resident pupils and dressers who have performed their respective duties to the satisfaction of the physicians and surgeons.

Students of Jervis Street Hospital are entitled to attend free of charge special courses in fevers at Cork Street Fever Hospital. Prospectus and all particulars may be obtained from the Hon. Secretary of the Medical Board, Dr. F. X. Callaghan, 25 Westland Row, Dublin.

SPECIAL HOSPITALS.

The chief of the special hospitals of Dublin are the Rotunda, the Coombe, and the National Lying-in-Hospitals, Cork Street Fever Hospital, the Royal Victoria Eye and Ear Hospital (amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Hospital), the Dental Hospital, the Orthopædic Hospital, and the Children's Hospitals in Harcourt Street and in Temple Street.

The Rotunda Hospital.—This institution is the largest and the oldest gynæcological and maternity hospital in the British Empire. The work performed by it is about three times greater than that of any other hospital of its kind in Ireland. The number of patients admitted to the hospital, and of those attended in the extern maternity has increased enormously within recent years. The routine daily work comprises the attendance on lectures on midwifery and gynæcology; practice in abdominal palpation; personal conduction of parturition both in the extern and the intern maternities; cystoscopic examinations; and attendance at the operative work of the hospital, in which the students assist. The hospital affords exceptional advantages to qualified men and women, for they (if considered competent) are permitted a certain amount of practical operative work—viz., use of forceps, curettings, perinœorrhaphy, etc. A special afternoon class in gynæcology is held by the Senior Assistant, and one in special pathology by the Pathologist. Fee for each, £2 2s. per month. The pathological laboratory has become an important feature of the hospital. Students can enter at any time for periods of one month or longer. Certificates of attendance are accepted by all the licensing bodies. The L.M. certificate is obtained by attendance at the hospital for six months, with the subsequent passing of an examination. A special certificate in gynæcology is presented to students whose work meets with the Master's approval. Paid clinical assistants are selected (from amongst those who have obtained the hospital L.M. certificate), for periods of six months. Women students can also reside in the hospital under conditions similar to men. The grounds of the hospital contain grass courts for lawn tennis and croquet, and a skating rink. The entire students' quarters have been rebuilt and refurnished, with electric light, new bath-rooms, reading-room, new billiard table, etc.

Fees for Pupils.—Intern :—One month, £6 6s. two months, £9 9s.; three months, £12 12s.; six months, £21; single months other than the first, £4 4s.; board and lodging in the house per week, £1 5s. Night students (not resident in house), £6 6s. for first three months; £4 4s. for the second three months. For further particulars apply to the Master, Dr. Henry Jellett, Rotunda Hospital, Dublin.

Coombe Lying-in Hospital.—This hospital, which devotes itself to the care of lying-in women, and to the treatment of diseases peculiar to women, was founded in 1826. The original hospital was removed, and the present maternity hospital erected in 1875. An up-to-date labour theatre and waiting ward were added in 1904. The new Gynæcological Hospital was finished in 1903. It contains two modern operating theatres. The former Gynæcological Hospital has been converted into sleeping rooms for resident pupils. The Pembroke Dispensary was opened in 1911. The hospital is situated centrally in a most densely populated district. In addition to a very large gynæcological practice, over 2,000 women are delivered annually. The Master visits the maternity wards daily with the students at 9.30 a.m. This is followed by a lecture on midwifery. At 11 a.m. the gynæcological wards are visited; following this a lecture on gynæcology, physical examinations, and operations take place in the theatres. At 4 p.m. on Mondays, Wednesdays, and Fridays, the Master conducts the gynæcological out-patient dispensary. This dispensary affords students exceptional advantages of acquiring a thorough knowledge of gynæcological diagnosis. At 5 p.m. on Tuesdays and Thursdays, the Master conducts a special class in practical obstetrics, including palpation, auscultation, pelvimetry, and operations on the phantom. Lady medical students can reside in the hospital. Extern assistants are appointed from among the students as vacancies occur. These most responsible appointments afford the students every opportunity of making themselves competent in practical midwifery. Candidates for the diploma of the Coombe Hospital must have their names on the books of the hospital for six months, during which time they must attend as frequently as possible, and be present at 30 deliveries. They then present themselves for examination, and if found qualified receive the diploma. The catering for the residents is in the hands of a competent housekeeper. Board and lodgings, £1 1s. per week. The students' quarters are comfortably furnished.

Fees.—Extern pupils (for full course of six months), £8 8s. This includes one month's residence in hospital. Intern pupils—one month, £4 4s.; each consecutive month, £3 3s.; six months and L.M. diploma, £18 18s. Board and lodging in the hospital, 18s. per week. Lady students, intern—one month, £5 5s.; each consecutive month, £4 4s.; six months and L.M. diploma, £18 18s. Registration fee, 10s. 6d. There is no extra charge for attendance at any of the dispensaries. Certificates of attendance from this hospital are accepted by all the licensing bodies.

* National Maternity Hospital.—This institution, under the joint mastership of Sir A. Horne and Dr. R. White, is situated in Holles Street.

*Cork Street Fever Hospital contains 266 beds. It is supported by subscriptions, an annual Government grant, and capitation grants for patients. Regular clinical instruction is given during the winter and summer sessions to those who desire a special course in fevers. There are also courses for the Diploma in Public Health. All particulars may be obtained on application to the Medical Superintendent.

The National Children's Hospital for the treatment of all non-infectious diseases peculiar to children, with which the Pitt Street Children's Hospital, founded in 1821, was amalgamated, contains 45 beds for the reception of cases of deformity and all other forms of surgical disease. There is a general dispensary for extern patients held daily from 10 to 11. Operations are performed on Saturday at 12 o'clock. Practitioners and students can attend on application to Sir Lambert H. Ormsby, F.R.C.S.I.

*The Children's Hospital, Temple Street, Dublin (under the care of the Sisters of Charity).—This institution is the largest children's hospital in Ireland. There are 100 beds available for patients; about 1,000 cases are admitted to the wards annually; and about 7,000 or 8,000 seen in the dispensary. A new operating theatre has recently been opened. It is fitted and furnished in the best possible fashion for present-day surgery. Special attention is given to orthopædic surgery.

The hospital is recognised for clinical instruction in the diseases of children by those licensing bodies which require a certificate of instruction in this important branch of medical education. A nursing home is in connection with the institution, and trained nurses are always available for private cases. Senior students or others requiring a post-graduate course at the hospital should apply for full particulars to Dr. M. C. Staunton, hon. sec., or to any member of the staff.

The Incorporated Orthopædic Hospital, Ireland.—This hospital was founded in 1876, and contains 80 beds. It is available for every class of deformity Particulars may be obtained from the Secretary, at the Hospital.

The Royal Victoria Eye and Ear Hospital, Adelaide Road.—This hospital, which was opened in March, 1904, is an amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Infirmary. The hospital contains 80 beds. Clinical instruction in diseases of the eye and ear, including the use of the ophthalmoscope and operations, is given daily from 10 till 1. Special classes for practical instruction in the use of ophthalmoscope, &c., and for the demonstration of cases, are formed from time to time.

The Incorporated Dental Hospital, Lincoln Place.—This hospital is the only special dental hospital in Ireland. It is officered by a strong staff of the leading dental surgeons of Dublin, and has a large *clientèle* and extensive practice among the Dublin poor. The fees are £12 12s. for each year's Dental Hospital practice, and proportionately smaller fees for shorter periods for surgeons and medical students. The term of pupillage in mechanical dentistry required by the various licensing bodies may be taken in the recently enlarged Hospital Laboratory. Particulars may be obtained from the Dean.

The City Hospital for Diseases of the Skin and Cancer, Holles Street.—Senior students are admitted free to the practice of this hospital, which has a large out-patient attendance, with 15 beds for intern cases. Classes of instruction will be given at regular intervals during the winter and summer sessions in the use of the Finsen light, X-rays, high frequency currents and radium, with demonstrations on (1) the production and use of the Röntgen rays, (2) electric currents, direct and alternating, with description of resistances, rectifiers and transformers; (3) accumulators, their construction, use, and methods in charging; (4) vacuum tube, choice of tube for particular kinds of work; fluorescent screen, and how to localise foreign bodies.

BELFAST HOSPITALS.

Royal Victoria Hospital.—Established 1791; incorporated by Royal Charter, 1875 and 1898. New hospital opened, September 17th, 1903. 300 beds; Convalescent hospital, 22 beds; Children's Hospital, 33 beds; Consumptive Hospital, 10 beds.

Clinical instruction in medicine and surgery is given each morning by the staff.

*Mater Infirmorum Hospital.—Established 1883. 160 beds. The New Mater Hospital, which was erected at a cost of over £50,000, was formally opened on April 23rd, 1900. During the year the intern patients numbered 1,525; accidents, 3,762, and cases treated in the Dispensary, 22,597; 389 surgical operations were performed. The total number of patients who received treatment was 27,884, being an increase of 1,517 as compared with the year 1904. A notable feature is in the number of accident cases, as the hospital is conveniently situated in proximity to a large working-class population, and within easy reach of most of the public works.

The Belfast Maternity Hospital (Incorporated).—Established 1794. 30 beds.—The practice of the Maternity Hospital, the certificate of which is recognised by all the universities and colleges, &c., is open to students. The fee for the session is £2 2s. Resident nurses are also received for training for a period of six months, and a diploma given which is recognised by public bodies. The hospital course is also recognised by the Central Midwives Board. Conditions for such on application to the Matron. During the year 1911, 567 patients were treated in the hospital, and 556 patients at their own homes. Besides this, 360 patients were dealt with in the extern gynæcological department. Clinical lectures and bedside demonstrations are given by members of the staff during both the winter and summer sessions. Students wishing to attend should apply to Dr. H. D. Osborne, 32 Lonsdale Terrace, Belfast, Hon. Secretary to Medical Staff.

Note.—Hospital was rebuilt in 1904 and removed to new premises in Townsend Street. A Resident Surgeon is elected periodically.

*Ulster Hospital for Children and Women, Mountpottinger, Belfast, is the only hospital in the large part of the city situated on the County Down side of the river. It is placed in a working-class district, and has a great field for its charitable operations. There are in the hospital about thirty beds for children and ten for women. There is an extern department for children open every week-day, except Saturday, from 9 till 10, and for women at 10.30, and a special department for diseases of the eye, ear, and throat on Tuesdays and Fridays from 9 till 10. During the summer and winter sessions, clinical instruction is given to students daily, operations being chiefly performed on Wednesday and Thursday. There is a resident midwife for extern work, and every facility is afforded students for attending their cases in the district.

Hospital for Sick Children (Incorporated), Queen Street.—This institution, erected by voluntary donations, and supported by voluntary contributions, was opened for the reception of patients on April 24th, 1879 It consists of a medical ward with twenty-eight beds, and one of a similar size for surgical cases. It is strictly non-sectarian in its principles, and is open to all denominations. Children from birth to the age of 12 years, and not suffering from contagious disease, are admissible as in-patients. A large extern clinic is conducted in the out-patient department between the hours of 9 and 10 a.m., where children from birth to 14 years are attended to. An operating theatre has been found necessary in the extern department, and has been erected. During the winter session systematic courses of lectures and demonstrations in the medical and surgical diseases of infancy and childhood are delivered in the wards on Wednesday and Saturday of each week at 9 a.m. At the close of the session an examination is held, and a gold medal awarded if sufficient merit has been shown. A Convalescent Home is maintained at Carrickfergus, Co. Antrim, in connection with the Hospital.

Ophthalmic Institution and Eye and Ear Hospital, Great Victoria Street, Belfast.—Established 1844. New hospital erected, 1867. Operation theatre added, 1902. New extern department, 1909. This hospital is situated on the main road between Queen's College and the Royal Victoria Hospital. It contains about 30 beds for intern patients, and a large extern department. The latter is open on Monday, Wednesday and Friday at 10 o'clock for eye cases, and on Monday and Thursday at 10 o'clock for ear cases. Special courses of instruction are given during the winter and summer sessions, but students can enter at any time, and can always obtain plenty of practice in ophthalmoscopic work. Full particulars may be had from Dr. J. Walton Browne, 10, College Square, N., Belfast.

Ulster Eye, Ear, and Throat Hospital.—Established 1871. New hospital opened 1874. 30 beds.

CORK HOSPITALS.

*North Charitable Infirmary.—Established 1774. 110 beds. Special wards for treatment of diseases of women and children. The extern department is largely made use of, and the number of accidents treated is very large. Clinical instruction is given daily from 9.30 a.m. to 12 noon. A new and thoroughly up-to-date operating theatre has recently been added at considerable expense.

Cork South Infirmary and County Hospital.—Founded 1773. The hospital contains 100 beds, available for clinical instruction, 40 medical and 60 surgical. There are also special wards devoted to the treatment of diseases peculiar to women and children, and a large medical and surgical extern department.

Clinical instruction is given daily during the session from 9.30 to 11.30, in both the medical and surgical wards, and clinical lectures are regularly delivered.

Students are regularly instructed in the methods of using the rays by practical demonstration on the cases requiring their use.

For further particulars apply to Norman I. Townsend, hon. sec.

Victoria Hospital for Women and Children.—Established 1874. 70 beds. A large amount of work is done in this hospital to relieve the poor of Cork, Kerry, and other counties.

* County and City of Cork Lying-in Hospital.—Established 1798. 17 beds.

* Eye, Ear, and Throat Hospital, Western Road.—Incorporated 1898. 35 beds. In-patients treated during year, 454; out-patients, 4,238. Clinical Instruction is given during college session. Special demonstrations in the use of the ophthalmoscope, laryngoscope, &c., are given from time to time.

* Fever Hospital and House of Recovery.—Established 1801. 110 beds.

* Maternity.—Established 1872.

* Mercy Hospital.—Established 1857. 80 beds.

GALWAY HOSPITALS.

* County Hospital.—Established 1786. 60 beds.

---

* No answer to our request for information received from these hospitals.

IRISH PUBLIC SERVICES.

The Poor-law Medical Service.

For several years past the unsatisfactory nature of the Irish Poor Law Medical Service, as a career for young practitioners, has been evident. In addition to the petty annoyances, the laborious and harassing duties, and the ever-increasing amount of clerical work which the new orders of the Local Government Board impose from time to time, the medical officers are underpaid, their salaries being totally out of proportion to the duties discharged, and in the majority of rural districts barely sufficent to cover the out-of-pocket expenses, such as are incurred in the keep of a horse and man, and other servants. So strictly is the poor law medical officer bound to the discharge of his duties that unless incapacitated by sickness or other cause, or with the permission of the guardians expressly granted, he cannot leave his district for a single day, even if he makes provision for the performance of his duties in his absence by a brother practitioner. It is right to point out to young practitioners the following facts: (1) That the Poor Law Medical Service is one in which there is no promotion. (2) That it is a service where few facilities exist for original research, and still less for further medical culture, especially in the rural districts. (3) That, while medical education has become wider in its requirements and more costly and difficult to procure, almost the same rate of payment as was given to less educated men forty years ago is still offered, and this, too, at a time when lucrative private practice is more difficult to obtain. (4) That there is no compulsory superannuation, and, as a consequence, many old and infirm men are forced to remain in the service long after they have become unfit to discharge the duties, seeing nothing but extreme poverty and perhaps the workhouse itself staring them in the face.

There are about 160 workhouse and about 810 dispensary medical officers. The salary is said to average about £114.

The dispensary medical officer is also *ipso facto* the registrar of births, marriages, and deaths, and medical officer of health for the district, under the Public Health Act, passed in 1873 and amended in 1878. The former office, in country districts, yields between £5 and £10 a year, and the emoluments of the latter appointment in very few cases reach £20, averaging about £12. The medical officer is also vaccinator for the locality, and is required to vaccinate everyone who applies. For each patient a fee of 2s. is paid, along with his salary, by the guardians, and the sum total of these fees varies, according to the populousness of the district, from £4 to £100, an average for the provinces being about £10.

Qualifications.—The qualifications required by the Local Government Board are a licence in surgery, in medicine, and in midwifery; but registration in the "Medical Register," if effected since the passing of the Medical Act, in 1886, fulfils all requirements. Candidates must also be 23 years of age. Candidates recently qualified must possess a certificate of competence in vaccination.

Duties.—The duty of the dispensary doctor is twofold. He has to attend his dispensary or dispensaries on a given day or days in the week. He has also to visit at any hour of the day or night a sick person for whose relief a visiting ticket has been issued and to continue his attendance as often as may be necessary to the termination of the case. Moreover, he has many books to keep and a multitude of returns to make, and in most districts he has to make up all the medicines for the poor.

Workhouse Hospitals.—The number of unions in Ireland is 159, to each of which is attached one or more medical officers, appointed and controlled by the board of guardians in the same manner as the dispensary medical officer. The salary is about the same as that of the dispensary doctor, and the duties of a more easy and satisfactory description, inasmuch as they are confined to daily attendance at the workhouse hospitals, and no night visits out of doors or long journeys across the country are involved.

The Irish Lunacy Service.

This service, at present, affords a comfortable livelihood for 22 resident medical superintendents and 32 assistants. The superintendents receive salaries and allowances ranging, according to the number of inmates of the asylum, from £500 to £1,000 a year, and the assistants receive salaries and emoluments averaging about £200 to £300 a year. There are also a few visiting physicians receiving about £120 a year, but this class of officer is being allowed to die out, and no new appointments will be made. The superintendents and assistants must devote their whole time to their duties.

The appointments of medical superintendents are in the hands of the asylum committees, with the proviso that no one shall be appointed who is not a registered practitioner with five years' service as assistant. The assistant is also appointed by the committee. In addition to these officers, there are, in certain larger asylums, clinical residents, who receive about £50 a year and full allowances. These appointments afford excellent introduction to the higher places in the service.

Tuberculosis Service.

Most of the county and county borough councils are proceeding to appoint tuberculosis officers to carry out work under the Tuberculosis Prevention Act (1908) and the National Insurance Act (1911). The duties proposed are usually (1) to act as superintendent of the county sanatorium; (2) to conduct one or more tuberculosis dispensaries; (3) to act as consultant with practitioners in regard to tuberculous patients; (4) to conduct a bacteriological laboratory; (5) to act as adviser to the local insurance committee and the county council in regard to tuberculosis; (6) to organise and conduct anti-tuberculosis work generally in the county or county borough.

The tuberculosis officers must give their whole time to their duties. The salaries offered vary from £350 to £500 a year, with an allowance for expenses. The lower figure must be regarded as quite inadequate, and candidates before applying for such posts should satisfy themselves that the conditions of service have been approved by the local medical profession.

National Insurance Work.

The National Insurance Act (1911) has provided a certain amount of employment for medical men. As the question of extending the medical benefit of the Act to Ireland is still under discussion, all present arrangements are of a purely temporary character. The conditions of many of the appointments made by the Insurance Commissioners are contrary to professional ethics, and before accepting any appointment in connection with the Insurance Act great care should be exercised to make sure that the conditions of service are satisfactory from a professional point of view. Inquiries on such matters may be directed to the Medical Secretary, Irish Medical Committee, Royal College of Surgeons, Dublin.

Other Appointments.

There are, in addition to those which we have mentioned, certain appointments open to medical practitioners in special localities. They are:—

(1) Surgeoncies to the county infirmaries. (2) Attendance on the Royal Irish Constabulary. (3) Attendance on the Coastguards. (4) Factory Surgeoncies. (5) Attendance upon the depot soldiers who are not otherwise provided for. (6) Attendance on Postal Officials. (7) Prison Surgeoncies.

In each county is an infirmary or public hospital, to which one or more surgeons are appointed. In most cases the surgeon receives a salary of about £120 a year, and the appointment is in the hands of the infirmary committee, which is nominated by the county council. Some of the recent appointments have been honorary. The position is a pleasant one, and gives scope for modern surgical work. It is considered the best introduction to county consulting work.

The Constabulary are paid for at the rate of 2s. per month for each member of the force on duty in the district, including the wives and children of the men, but not of the officers. This includes the supply of medicines. The appointment to this position rests with the Inspector-General of the Royal Irish Constabulary, who usually acts upon the advice of the local district inspectors as to the convenience of the men, and, of course, the emoluments depend on the number of Constabulary stations and the number of men in each.

The Coastguard Service.—The duty of the medical officer is to attend the men when sick and to examine candidates either for admission or for superannuation. The fees vary from 5s. to 2s. 6d. per visit. The appointments rest with the Admiralty, but are usually secured for the local Poor Law medical officer. The emoluments depend on the number of stations and men, which are now very few.

Factory surgeoncies are in the gift of the Chief Inspector of Factories in Whitehall. There is a set scale of payment by the factory owner to the inspector for this work, but we believe it is not adhered to, and, in some districts, at all events, the emolument is a matter of arrangement. The amount depends upon the size of the factory, the position being, in Dublin or Belfast, or in other large manufacturing centres, a lucrative one, but in other places scarcely worth taking. The attendance on the military depôts is not worth mentioning.

Attendance upon postal servants is badly paid, except in the large towns, and the inspecting and sanitary duties are onerous.

Surgeons to the prisons are appointed by the Lord Lieutenant. The salaries for visiting surgeons vary from about £40 a year to £150. In the larger prisons there are whole-time surgeons.

For further particulars see advertisements:—

Royal College of Physicians...	56
Schools.	
University of Dublin ...	54
Royal College of Surgeons ...	50
University College, Galway ...	57
Queen's University of Belfast	55
University College, Dublin..	47
General Hospitals:	
Royal City of Dublin	52
Sir Patrick Dun's	48
City Hospital for Diseases of the Skin and Cancer ...	53
St. Vincent's Hospital ..	54
Richmond, Whitworth and Hardwicke	57
Meath	51
Jervis Street	50
Special Hospitals:	
Coombe Lying-in Hospital ...	53
Rotunda, Lying-in	51
Royal Victoria Eye and Ear	53
National Children's	57
Incorporated Dental	56
St. Vincent's Asylum for the Treatment of Mental Disease	47

Scotland.

In London the hospital is the unit of the medical school; in Scotland medical education is centred round the four Universities. It is very much a matter of convenience, or of fancy, which University the student seeks. Naturally, to those with no local ties, the prestige attaching to the Edinburgh degree proves attractive, and the number of graduates from overseas who attend the University is proof that its reputation is not declining. In addition to the University degrees, one other qualification to practise can be obtained in Scotland—the joint licences of the Royal College of Physicians, the Royal College of Surgeons, Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow. The standard of examination for the triple qualification (as it is called), though lower than that of the Universities, is yet high enough to test the abilities of the candidates, if one may judge from the number of rejections. The standard, too, is being gradually raised. Of late years there has been a falling off in the number of candidates for the triple qualification, and the majority are not Edinburgh-trained students, but hail from other schools. The diminution of the number of Scottish students is generally ascribed to the operations of the Carnegie benefaction enabling men who formerly would have been unable to do so, to take the University course. One characteristic feature of the Scottish medical schools is the existence, side by side with the University, of extra-mural schools, independent in every respect of the University, and recognised by the latter as schools whose classes qualify for graduation. The extra-mural school has suffered, just as the triple qualification has, from the Carnegie bequest, and there is reason to believe that under modern conditions it is unlikely to occupy such a prominent place as in the past. The proposed introduction by the Universities of a composition fee for the medical curriculum is viewed by the extra-mural lecturers with dislike, because it is feared that if it comes into effect the number of extra-mural students will again decline. (*a*)

It must also now be admitted that the tendency towards concentration of teaching under the ægis of the University is stronger than in the past. The increased cost of equipment for teaching, in particular, renders it difficult, if not impossible, for an unendowed school to compete with a University. This applies especially to the preliminary and purely scientific subjects of the curriculum up to and including physiology and pathology. It is doubtful whether it will long remain possible for such subjects to be adequately taught by private individuals who have to depend largely or wholly on class fees for their remuneration.

During the last few years the medical curriculum has been subjected to the most careful scrutiny, and it has undergone, and is still undergoing, great changes for the better. An agreement has lately been entered into by the managers of the Infirmary and the University of Edinburgh, under which the facilities for clinical teaching, and for pathology, are much enhanced. It may now be said, without fear of contradiction, that the education given in the Scottish schools generally has no need to fear comparisons. The dispensary system is peculiar to Scotland; what we know as a dispensary differs entirely from a dispensary in the English sense of the word. A dispensary is an out-patient clinic, separate from any hospital, staffed by honorary medical officers, and attended for instruction by students. Not the least important part of the student's curriculum is his attendance for several months on outdoor patients in their own homes under the same conditions as obtain in practice among the lower working classes. University students have the privilege of working under extra- as well as intra-mural teachers, while men going up for the triple qualification are limited to the latter. It is not uncommon, however, for a man to come up intending to take the licence, and to change his mind and go in for a degree, or *vice versâ*, and this can usually be done without much trouble or added expense, provided the change is made early in the course. The maternity training is still a weak spot in the Edinburgh curriculum, and many students are in the habit of going to Dublin or Glasgow for their practical midwifery. Great difficulties apparently stand in the way of making the work in Edinburgh what all its teachers would like—among them the material which is required for training midwives under the new Act—and though amalgamation of various institutions, and the opening of a residency in connection with the maternity hospital, have done something to improve matters, they have, to a certain extent, fallen short of what was hoped. When all is said and done, however, the Scottish graduate or diplomate receives an excellent training in his profession, and it can no longer be said that his course, though good in theoretical subjects, is defective in practical work. It is impossible to make any very definite statement as to the relative cost of a medical education in the different schools, as compared with London and Dublin, as so much depends on the extra classes taken out, the mode of living, and so on. The minimum inclusive fees for the licence are £120, for the M.B. degree about £146; but almost every student finds it practically necessary to attend additional classes.

THE CARNEGIE TRUST.

Through the munificence of Mr. Andrew Carnegie, LL.D., payment is now made " of the whole or part of the ordinary class fees exigible by the Universities from students of Scottish birth or extraction, and of sixteen

---

(*a*) This aspect of the composition fee is dealt with in a separate article on page 300.

wa
size

years of age or upwards, or scholars who have given two years' attendance, after the age of fourteen years, at State-aided schools in Scotland, or at such other schools and institutions in Scotland as are under the inspection of the Scottish Education Department."

The Trust provides for the payment of the class fees of the above students proceeding to graduation in medicine or science. Application for payment of class fees under the conditions of the Trust should be made to the Secretary, Mr. W. S. McCormick, Merchants' Hall, Edinburgh.

UNIVERSITY OF EDINBURGH.

Four degrees in medicine are granted; Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The first two must be taken together, the last two may be taken separately.

No one is admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery who has not been engaged in medical study for five years after passing a preliminary examination in general knowledge in accordance with the medical ordinances. A degree in Arts or Science of a British or other recognised University is held to supersede such preliminary examination. The subjects included in this general examination are English, Latin, elementary mathematics, and Greek, or French, or German.

The *annus medicus* of each year is constituted by at least two courses of not less than one hundred lectures each, or by one of such courses, and two courses of not less than fifty lectures each, exclusive of the clinical courses. Two years of the five must be spent at the University, the remaining three years at any other Medical School recognised by the University Court.

During the first four years the student must attend botany, zoology, physics, practical chemistry, practical physiology, practical pathology, and medical jurisprudence during courses of not less than 2½ months each; public health, not less than forty lectures; practical anatomy, during two courses of not less than five months each; chemistry, anatomy, physiology, pathology, surgery, materia medica, medicine and midwifery during courses of not less than five months each. He must attend a course of twenty-five lectures on practical pharmacy, or have dispensed drugs for a period of three months in a recognised hospital or dispensary. He must attend a nine months' course in clinical medicine and in clinical surgery. During the fifth or final year he must be engaged in clinical study for at least nine months. In all, before graduation, he must have done hospital work for at least three years, and have acted as clerk in the medical and surgical wards and attended for six months the practice of a dispensary, or of a physician and surgeon. He must also have studied (1) operative surgery; (2) mental diseases; (3) *post-mortems*, fevers, diseases of the eye, diseases of children, of the ear, nose and throat, and of the skin; (4) vaccination; (5) practical anæsthetics.

He must attend at least 25 cases of labour under the superintendence of a registered medical practitioner or 12 such cases, and, for at least three months, the practice of a midwifery hospital.

Each candidate is examined both in writing and *vivâ voce*:—

1. On zoology, botany, physics and chemistry.
2. On anatomy and physiology.
3. On pathology, and materia medica and therapeutics.
4. On medicine, surgery, midwifery, forensic medicine, and public health.

The order of examination (for students beginning in winter) is as follows:—Physics, end of first half of first winter; Chemistry, end of second half of first winter; Zoology and botany, end of first summer; Physiology, end of second summer; Anatomy, end of first half of third winter; Practical materia medica, end of second half of third winter; Pathology, end of third summer; Materia medica, end of second half of fourth winter; Medical jurisprudence and public health, end of fourth summer; Midwifery, Medicine and Surgery, end of fifth winter; Clinical medicine, surgery, and gynæcology, end of fifth summer. An interval of 3 months must elapse between the date of passing the systematic subjects and the date of appearing for the clinical subjects.

The degree of Doctor of Medicine may be conferred on any Bachelor of Medicine and Bachelor of Surgery, who is of the age of twenty-four years, and who produces a certificate of having been engaged, subsequently to his having received the degree of M.B. and Ch.B., for one year in attendance on a hospital, or in scientific work bearing directly on his profession, or in the military or naval medical services, or for two years in practice other than purely surgical. The candidate shall submit to the Faculty of Medicine a thesis on any branch of knowledge comprised in the professional examinations for the degrees of Bachelor of Medicine and Bachelor in Surgery. The candidate will also be examined in clinical medicine and must show practical acquaintance with advanced methods of diagnosis; he may take gynæcology, mental diseases, or diseases of children for one of his three cases. The degree of M.D. is conferred on holders of the degrees of M.B., C.M. (Old Regulations) on the submission of a thesis approved by the Medical Faculty, provided that the candidate has passed the preliminary examination in the subjects of Greek and logic or moral philosophy. Should the candidate elect to do so, he may, however, take the M.D. degree under the new regulations, *i.e.*, substituting an examination in clinical medicine for that in Greek and logic. This course is usually pursued by those who did not pass in these subjects with the rest of their preliminary examinations.

The regulations for the degree of Ch.M. are very similar.

Fees:—The fee to be paid for the degrees of Bachelor of Medicine and Bachelor of Surgery is twenty-two guineas. The fee for the degree of Doctor of Medicine or of Master of Surgery is ten guineas (Old Regulations, £5 5s.).

The total expense of the curriculum, including examination and matriculation fee, is about £146.

Among scholarships, &c., open for competition during the session 1913-14, are the following:—Vans Dunlop scholarships value £100; Buchanan scholarship in midwifery, value £40; Mouat scholarship in practice of physic, £57; Allan Fellowship in clinical medicine and surgery, £55. There are also a great many other bursaries, fellowships and prizes open during the session of 1913-14 and for the details governing entry for these the University Calendar (James Thin, South Bridge, Edinburgh) should be referred to.

Graduation in Public Health.—Degrees (B.Sc. and D.Sc.) are also conferred in Public Health. Candidates must be graduates in medicine and must matriculate for the year in which they proceed for examination. They must (1) have worked at least twenty hours a week during a period of eight months in a recognised Public Health laboratory—five of these months must be spent consecutively in the Public Health Laboratory of the University of Edinburgh; and (2) have attended a course of lectures on physics in addition to that qualifying for graduation in medicine, and one on geology.

Candidates for the second examination are not admitted until eighteen months have elapsed after having passed M.B., Ch.B., or sooner than six months after the first examination. They must have attended two courses of Public Health, one dealing with medicine, the other with engineering in relation to public health. They must also have studied practical sanitary work under a Medical Officer of Health for six months, have had three months' instruction in a fever hospital, and three months' instruction in mensuration and drawing.

Fees for Science Degrees: B.Sc., first examination, £3 3s.; B.Sc., second examination, £3 3s.

Diploma of Tropical Medicine.—The University Diploma of Tropical Medicine and Hygiene is conferred only on those possessing a degree in medicine. The course includes practical bacteriology, tropical diseases and hygiene, the zoological character and life history of disease-carrying insects and venomous animals, clinical instruction at an hospital for tropical diseases. The examination is held in January and July, the fee being £ 4s. A special certificate in Tropical Diseases is also granted under less stringent regulations, and after a shorter course.

Diploma in Psychiatry.—The course extends over one year, during which candidates must attend classes on (1) Anatomy and (2) Physiology of nervous system, (3) Pathology, (4) Bacteriology in relation to nervous system, (5) Psychology, (6) Clinical Neurology, (7) Psychiatry, (8), Clinical Psychiatry. There are two examinations, one on anatomy, physiology, pathology and bacteriology; the second on the remaining subjects. The fees amount to about thirty-seven guineas.

University Hall, Edinburgh.—In Edinburgh there are numerous halls of residence for under-graduates. In each house there are private studies with or without bedrooms, and common sitting and dining rooms. The charges are moderate. It is a satisfactory indication of the comfort of the Hall that many graduates live in it and are willing to help or coach the undergraduates for moderate fees. To gain admission two references must be produced from past or present residents, or other suitable person. These are considered and voted on at a house meeting, and any unruly member may be expelled by a similar meeting of the residents

Medical School for Women.—Classes for women are carried on in the College of Surgeons and the New School, by Lecturers recognised by the University.

Information may be obtained, on application to the Dean, School of Medicine of the Royal Colleges, College of Surgeons, Edinburgh. Session begins October 1st, 1913. The classes qualify both for the Edinburgh University degree and for the Licence of the Triple Board, and are for women alone. The University of Edinburgh does not recognise certificates presented by female candidates for mixed classes without special cause shown. Women students are eligible for the benefits of the Carnegie Bequest.

UNIVERSITY OF GLASGOW.

The University of Glasgow is both a teaching and an examining body, but admits to examination only those candidates whose course conforms to its own regulations. Within certain limits provision is made for accepting instruction given by recognised medical schools and teachers; but not less than one half of the subjects other than clinical must be taken in this or some other recognised University entitled to confer the degree of M.D., and at least two years of the course must be taken in Glasgow University. Four degrees, open both to men and to women, are conferred—M.B. and Ch.B. (always conjointly), M.D. and Ch.M. A preliminary examination must be passed in (1) English, (2) Latin, (3) Mathematics, and (4) an Additional Language, namely, Greek, French, German, Italian, or other approved language, with possible options to students whose native tongue is not English, and, on passing, students must register in the books of the General Medical Council. For M.B. and Ch.B. a curriculum of five years is required. A syllabus with full details of the curriculum and of the preliminary examination may be had, post free, on application to the Registrar.

The fees for M.B. and Ch.B. are £23 2s.; for M.D. £15 15s., and for Ch.M. £15 15s. For hospital attendance there is an initial fee of £10 10s., with a further fee of £3 3s. for each winter session, and £2 2s. for each summer session, of clinical instruction. There are three very extensive general hospitals in the city, which afford exceptional opportunities for clinical work, while the Royal and other asylums, the City Fever Hospitals, the Maternity Hospital, the Sick Children's Hospital, the Eye Infirmary, &c., give facilities for the study of special branches.

The degrees of B.Sc. and D.Sc. in Public Health and of B.Sc. in Pharmacy, are also now conferred. Of late the University has made considerable efforts to extend its laboratory accommodation and equipment, to augment its teaching staff, and to encourage post-graduate and research work. Within recent years there have been provided new laboratories in the departments of pathology, anatomy (costing £13,000), chemistry, and surgery (costing £9,900); while new laboratories, costing, with equipment, upwards of £50,000, have been erected for the departments of physiology, materia medica, and medical jurisprudence and public health.

Bursaries and prizes to the annual amount of about £1,000 are appropriated to medical students, including an Arthur bursary for women, £20 for three years.

Several bursaries open to students in any faculty are not infrequently held by medical students, and Scholarships and Fellowships to the annual amount of £1,600 may be held by medical students who have gone through the Arts course.

Queen Margaret College for Women. — Founded in 1883 (by the Glasgow Association for the Higher Education of Women, which was formed in 1877 with the object of bringing University instruction, or its equivalent, within the reach of women), Queen Margaret College in 1890 added to its faculty of Arts a School of Medicine for Women. This was organised entirely on University lines, and with the view of preparing for University degrees; and when, in 1892, in consequence of the Ordinance of the University Commissioners authorising the Scottish Universities to admit women to instruction and graduation, Queen Margaret College became the Women's Department of the University of Glasgow, its classes in medicine taken previously to its incorporation with the University were recognised as preparing for the degree. A full course of study for M.B. and Ch.B. is given by University professors and lecturers, with excellent facilities for hospital and dispensary work in the Royal Infirmary and other hospitals. A Hall of Residence for the students was founded in 1894. Fees for the classes at Queen Margaret College may be paid by the Carnegie Trustees; and several bursaries are open to women students of medicine.

The Winter Session begins on 13th October. The prospectus can be obtained from the Mistress, Miss Melville, Queen Margaret College, Glasgow.

UNIVERSITY OF ABERDEEN.

The University of Aberdeen possesses under its charters the amplest privileges claimed or enjoyed by any academical institution. It confers degrees in the five faculties of Arts, Science, Divinity, Law, and Medicine. It also grants diplomas in Public Health, and Agriculture. It is, moreover, a teaching body equipped with twelve distinct chairs in the various branches of medicine and surgery. The majority of the professors devote their whole time to the work of the chairs. There are fully-equipped laboratories, the accommodation for which has recently undergone considerable extension. The degrees of M.B. and Ch.B. are conferred together; they cannot be obtained separately. The curriculum of study is nearly the same as in the University of Glasgow; the regulations in the preceding columns will therefore apply here. Two years must be passed at Aberdeen. With regard to fees, each candidate for the degrees of M.B. and Ch.B. must pay a fee of £5 5s. in respect of each of the first three professional examinations, and £7 7s. for the final examination. Total cost, exclusive of the fees for degrees, is about £130. Besides the Royal Infirmary students have the opportunity of attending several other local institutions where special courses of instruction are given. Perpetual fee for hospital practice £10. The professional examinations are held twice in each year, namely, in March and July, directly after the close of the winter and summer sessions.

Bursaries.—Bursaries, Scholarships, and Fellowships to the number of fifty, and of the annual value of over £1,180, may be held by students of medicine. (See "University Calendar.")

The Degree of M.D.—The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of M.B. and Ch.B., is of the age of twenty-four years, and has been engaged subsequently to his having received the degree of M.B. for one year in attendance in a hospital, or in scientific research bearing on his profession, or in military or naval medical service, or for two years in medical practice, and has presented a thesis which has been approved of by the Medical Faculty. Candidates are required to pass an examination in clinical medicine or another Department of Medical Science in addition to presenting a thesis. Similar regulations apply to a degree of Ch.M. (Master of Surgery).

A Diploma in Public Health is conferred after examination on graduates in medicine in any University in the United Kingdom. Regulations may be seen in the "Calendar," or obtained on application to the Secretary of the University.

Aberdeen Royal Infirmary.—This is a well-equipped institution, containing 250 beds, and affords excellent opportunities for clinical study to students at the Aberdeen University. The city, moreover, offers inducement in the way of cheaper living and comparative quiet to that obtained in Edinburgh and Glasgow, and will doubtless be preferred by some on this account.

ST. ANDREWS UNIVERSITY.

United College, St. Andrews, and University College, Dundee.

This University (session opens October 14th) grants the degrees of M.B., Ch.B., M.D., and Ch.M. The degrees of the University are open to either sex. For the degree of M.B., Ch.B., two of the five years of medical study must be spent in the University of St. Andrews; the remaining three may be spent in any University of the United Kingdom, or in any foreign, Indian, or Colonial University recognised for the purpose by the University Court, or in such medical schools or under such teachers as may be recognised for the purpose by the University Court. The preliminary examination and the professional examinations are of the same character as in the other Scottish Universities. A Diploma in Public Health is also granted by the University of St. Andrews to graduates in medicine of any University in the United Kingdom. Twelve months must elapse between the date of graduating in medicine and entering for the examinations for the diploma. The course of study required consists of (1) a six months' course of practical chemistry, bacteriology, and the pathology of diseases transmissible from animals to man in a laboratory of the University of St. Andrews; (2) six months' work with a medical officer of health; (3) three months' clinical instruction in infectious diseases. Subjects for first examination:—Chemistry, physics, bacteriology, and meteorology. Second examination:—Sanitation, sanitary law, vital statistics, medicine in relation to public health.

University College, Dundee, was affiliated and made to form part of the University of St. Andrews in 1897, and the whole medical curriculum may be taken at the medical school of that College. The United College, St. Andrews, offers classes for the first two years of professional study.

Bursaries and Scholarships.

United College, St. Andrews.—Nine Taylour Thomson bursaries for women, of the annual value of from £15 to £25 each—tenable for three years—preference to women medical students. Two Malcolm bursaries of the value of £25 each, tenable by men or women, for five years. Seventeen additional bursaries, including two of £50, one of £40, one of £30, six of £20, one of £15, and six of £10, are open to competition by students of medicine, arts, or science.

University College, Dundee.—Twelve entrance bursaries of the value of £15 each, and fourteen second and third year's bursaries of the value of £20 and £15 are open to competition. Two fourth and two fifth year's bursaries of £20 each are open to students who take the complete curriculum in Dundee. These are all tenable for one year. Other bursaries, of which the patronage is vested in trustees, are available.

The fees for the complete course, exclusive of the examination fees, amount to about £130.

Preliminary Examination.—The preliminary examination in Medicine will take place at the United College, St. Andrews, on September 13th, 15th, 16th, 17th, and 18th. Each candidate must apply to the Secretary for a schedule, to be filled up and returned not later than August 31st. The subjects of examination are: English, Latin, Elementary Mathematics, and Greek, or French or German, and the fee is half-a-guinea.

Fees.—Clinical medicine and clinical surgery, £4 4s. winter session; clinical medicine and clinical surgery, £3 3s. summer session; clinical obstetrics, £3 3s. winter session; £2 2s. summer session.

Fees for Degrees.—Total fees for M.B., Ch.B., are the same as at other Scottish Universities—*i.e.*, 22 guineas (payable in instalments). Fee for the degree of M.D., and also for that of Ch.M., is 10 guineas in each case. For the Diploma of Public Health examinations the fee is £5 5s. for each of the two examinations.

Class Fees.—The fee payable in each of the following classes is 4 guineas, *viz*:—Chemistry, physics, zoology, botany, physiology, anatomy, materia medica, pathology, forensic medicine, and public health, medicine, surgery, and midwifery. The fee for the practical classes in these subjects is 3 guineas each. In clinical surgery and clinical medicine, the fee is £4 4s.; ophthalmology, diseases of the throat, nose, and ear, diseases of the skin, and mental diseases, the class fees are 2 guineas each. The fee for Public Health chemistry required for the D.P.H. is 7 guineas. A special class in Bacteriology is also held for the D.P.H. for which the fee is 3 guineas.

Dundee District Asylum.—The appointments include two qualified resident assistants and two resident clinical clerks. Clinical instruction is given.

Dundee Royal Infirmary.—Clinical instruction is given at the Infirmary which contains 400 beds, with an annual average number of over 4,000 in-patients, and an annual daily residence of 280, with special wards for maternity cases, diseases of women, diseases of children, diseases of the eye, diseases of the ear, throat and nose, cancer, incipient insanity, and for cases requiring electric treatment. Six resident qualified assistants and an outdoor obstetric assistant are appointed annually. Clinical clerks and dressers are attached to the physicians and surgeons, and students are appointed to assist in the post-mortem room. The instruction given at the Infirmary is recognised for purposes of graduation by the Scotch Universities, the University of London, the University of Cambridge, the Royal University of Ireland, and by the Royal Colleges of England and Scotland. Hospital Tickets for the Infirmary, £2 2s. each session, or £3 3s. a year. Perpetual, £10 in one payment, or £10 10s. by instalments.

Further information will be found in the Calendar of the University published by Messrs. Blackwood and Sons, Edinburgh, the "Calendar of University College," Dundee (obtainable from the Secretary), or can be had from the Dean of the Medical Faculty, Professor J. A. Kynoch.

THE COLLEGES.

The Royal Colleges of Physicians and of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow have arrangements by which the student may obtain the diploma of the co-operating bodies, and can register three diplomas under the Medical Acts—*viz.*, Licentiate of the Royal College of Physicians of Edinburgh, Licentiate of the Royal College of Surgeons of Edinburgh, and Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

The three bodies grant their *single* qualifications only to candidates who are already registered as possessing another and opposite qualification in medicine and surgery as the case may be.

Regulations of the Conjoint Board of the Royal Colleges of Physicians and of Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons, Glasgow.—The candidate must produce certificates of having attended the following course of lectures, the certificate distinguishing the sessions and the schools in which the courses were attended.

Anatomy, six months; practical anatomy, twelve months; chemistry, six months; practical chemistry, three months; materia medica, three months; physiology, six months; medicine, six months; clinical medicine, nine months; surgery, six months; clinical surgery, nine months; midwifery, three months; medical jurisprudence, three months; pathology, three months. The candidates must also produce the following certificates:—(*a*) Of having attended six cases of labour under the superintendence of a registered practitioner. (*b*) Of having attended for three months instruction in practical pharmacy. The teacher must be a member of the Pharmaceutical Society of Great Britain, or the Superintendent of a laboratory of a public hospital or dispensary, or a registered practitioner, or a teacher to a class of practical pharmacy. (*c*) Of having attended for twenty-four months the medical and surgical practice of a hospital, containing eighty patients, and possessing distinct staffs of physicians and surgeons. (*d*) Of having attended for six months the practice of a public dispensary, or of having assisted for six months a registered practitioner. (*e*) Of having been instructed in vaccination.

First Examination, Fee £5.—The First examination shall embrace chemistry, physics, and elementary biology, and shall take place not sooner than the end of the first year, including a winter and summer session. Candidates who desire to enter for the first professional examination must produce certificates of attendance on chemistry, practical chemistry, anatomy, and six months' practical anatomy.

Second Examination, Fee £5.—The Second examination embraces anatomy and physiology and shall not take place before the termination of the summer session of the second year of study. Candidates must produce certificates of attendance on anatomy, practical anatomy, and physiology.

Third Examination, Fee £5.—Comprises the subjects of pathology, materia medica, and pharmacology and advanced anatomy.

Final Examination, Fee £15.—The Final examination embraces medicine (including therapeutics and medical anatomy, clinical medicine); surgery (including surgical anatomy and surgical pathology); clinical surgery; midwifery and gynæcology, medical jurisprudence and hygiene; and shall not take place before the termination of the full period of study.

Subjects of Preliminary Education: (1) English grammar and composition; (2) Latin, grammar, translation from specific authors and easy unseen translation; (3) (*a*) arithmetic, to vulgar and decimal fractions; (*b*) algebra, to simple equations; (*c*) geometry, to the first two books of Euclid; (4) elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics; (5) one of the following:—(*a*) Greek; (*b*) French; (*c*) German; (*d*) Italian; (*e*) any other modern language; (*f*) logic; (*g*) botany; (*h*) zoology; (*i*) elementary chemistry.

Qualification in Public Health.—The College of Physicians, in association with the Royal College of Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons of Glasgow, confers a certificate of competency in public health. The examinations are held in April and October. Fee, £10 10s.

For the special regulations of the Royal College of Surgeons of Edinburgh, intending candidates should apply to Mr. James Robertson, 48 George Square, Edinburgh; and for those of the Royal College of Physicians, to the Secretary.

The Fellowship of the Royal College of Physicians of Edinburgh is conferred only by election, and the candidate must have been a member of the college for at least three years, and have attained the age of twenty-seven years.

The Membership is conferred only on a licentiate of a college of physicians or graduate in medicine of a British or Irish University, provided he shall have attained the age of twenty-four years and shall have passed an examination on: (1) medicine, including therapeutics; (2) on one of the following optional subjects, *in which a high standard of proficiency is expected*:—(*a*) a department of medicine specially professed; (*b*) psychological medicine; (*c*) pathology; (*d*) medical jurisprudence; (*e*) public health; (*f*) midwifery; (*g*) gynæcology. The examination is of a searching character.

The fee for membership is 35 guineas, for fellowship 38 guineas, with a stamp duty of £25—£101 13s. in all.

The licence, or single qualification in medicine, is conferred on candidates who already possess a recognised qualification in surgery. The examinations for this licence are held on the first Wednesday of each month, save those of September and October, in medicine, materia medica, midwifery and medical jurisprudence. The fee is £15 15s., and intending candidates should communicate with the Secretary of the College at least eight days before the date of examination.

The Fellowship of the Royal College of Surgeons of Edinburgh is conferred (except under certain conditions as to age and professional standing) only on candidates who have passed a special examination, and have previously obtained a diploma from the college, or from either of the Colleges of Surgeons of England or Ireland, or the Royal Faculty of Physicians and Surgeons of Glasgow, or the surgical degrees of the Universities of Great Britain, and who are twenty-five years of age. The subjects for examination for those who are already Licentiates of the College are on the principles and practice of surgery, clinical and operative surgery, and one optional subject.

Those who are not Licentiates of this College: on principles and practice of surgery, clinical and operative surgery, surgical anatomy, and one optional subject; and in such supplementary subjects as have not, in an adequate manner, been included in the examination for the registrable surgical qualification possessed by such candidates, and which are required in the examination for Licentiates of this College.

The optional subjects shall embrace: (*a*) Surgery, special branches; (*b*) advanced anatomy and physiology; (*c*) surgical pathology and morbid anatomy; (*d*) midwifery and gynæcological medicine and surgery; (*e*) medical jurisprudence and hygiene; (*f*) practice of medicine and therapeutics. The examinations are written, oral, and practical. Three weeks' notice must be given to Mr. James Robertson, from whom full particulars as to certificates required may be obtained. The fee is £30 for those who hold the diploma of Licentiate of the College, and £45 to others (no stamp duty is payable on the diploma). Registered practitioners, aged not less than 40, who have been in practice for not less than ten years, and who have highly distinguished themselves by original investigations, may under special circumstances be elected without examination. Women are not admitted to the Fellowship of either college.

LICENCE.—The examination embraces the principles and practice of surgery (including operative surgery and surgical pathology), clinical surgery, and surgical anatomy, and shall not take place before the termination of the full period of study. Fee, £15 15s.

DENTAL DIPLOMA.—Every candidate for the dental diploma must have attended the general lectures and courses of instruction required at a University or an established medical or dental school recognised by the College as qualifying for the diploma in surgery. The fee is £10 10s.

Edinburgh Royal Infirmary.—Clinical instruction is afforded at this institution, which contains 900 beds under the supervision of professors of the University and the ordinary physicians and surgeons of the Infirmary. Special instruction is given on diseases of women, physical diagnosis, diseases of the skin, eye, ear, throat and teeth, and anæsthetics. Separate wards are devoted to venereal diseases, diseases of women, diseases of the eye, also to cases of incidental delirium or insanity, and three wards are specially set apart for clinical instruction to women students. Post-mortem examinations are conducted in the anatomical theatre by the pathologists. The perpetual fee, on one payment, £12; the annual fee, £6 6s.; half-yearly, £4 4s.; quarterly, £2 2s.; monthly, £1 1s. Separate tickets amounting to £12 12s. entitle the student to a perpetual ticket. No fees are payable for any surgical or medical appointment.

The appointments are as follow :—

1. Resident physicians and surgeons are appointed and live in the house free of charge. There is no salary. The appointment is for six months.

2. Non-resident physicians and surgeons (in the special subjects and for out-patient work) are appointed for six months. These appointments may be renewed.

3. Clerks and dressers are appointed by the surgeons and physicians. These are open to all students and junior physicians holding hospital tickets.

4. Assistants in the pathological department are appointed by the pathologists to conduct post-mortem examinations in the anatomical theatre.

Royal Hospital for Sick Children.—During the year three courses of clinical instruction are given by the staff of the hospital, who are recognised as University Lecturers on the subject. The course consists of clinical lectures, ward cliniques, attendance at *post mortems* and out-patient cliniques. Hospital tickets, £1 1s.

SCHOOL OF MEDICINE OF THE ROYAL COLLEGES, EDINBURGH.

The government of this school, established in 1505, is now vested in a board which is equally representative of the two Royal Colleges and the Lecturers, the school being styled "The School of Medicine of the Royal Colleges, Edinburgh." The present number of lecturers is fifty seven, of whom the greater number deliver qualifying courses of instruction of the same duration and scope as those delivered within the University, while a large number of non-qualifying courses on special subjects of interest to medical science, but which are not required for graduation, are delivered both in the winter and summer sessions. The students who attend the classes of the School of Medicine are largely students proceeding to the University degree, as well as those who are intending to take other diplomas, such as the triple qualification. For particulars apply to the Dean of the School, 11 Bristo Place, Edinburgh.

The minimum cost of the education in the School of Medicine for the triple qualification of physician and surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons of Glasgow, including the fees for the joint examinations, is about £120, which is payable by yearly instalments during the period of study.

The Winter Session opens October 7th.

GLASGOW EXTRA-MURAL SCHOOL.

St. Mungo's College and Glasgow Royal Infirmary.—This college was incorporated in 1889 under its present title, being formerly known as the Glasgow Royal Infirmary School of Medicine. The Medical Faculty occupies buildings erected for the purpose of the medical school in the grounds of the hospital. The college is equipped with a complete electric light installation, and a powerful electric educational lantern. Attendance on the classes in St. Mungo's College qualifies for the medical degrees of the Universities and the medical and surgical colleges in accordance with their regulations. A syllabus, giving details as to classes, fees, &c., may be had on application to the Secretary of the Medical Faculty.

The Royal Infirmary, which is at the service of the College for teaching purposes, is one of the largest general hospitals in the kingdom. It has 600 beds available for clinical instruction, in addition to an ophthalmic department, and it has special wards for diseases peculiar to women, venereal diseases, burns, and diseases of the throat, nose, and ear. At the dispensary special advice and treatment are given in diseases of the eye, ear, teeth, and skin, in addition to the large and varied number of ordinary medical and surgical cases which in a great industrial centre daily require attention. Students at the college and hospital get the benefit of dispensary experience free of charge, and no better or wider field for seeing hospital practice and receiving clinical experience can be found than in the Glasgow Royal Infirmary.

Clinical instruction in midwifery is given in the fine new Maternity Hospital by Prof. Jardine.

Appointments.—All appointments are open. There are five physicians' and ten surgeons' assistants, who obtain free board and residence in the hospital and act in the capacity of house physicians and house surgeons. There is also a house surgeon for the ophthalmic department. These appointments are made for six months, and are open to gentlemen who have a legal qualification in medicine and surgery. Clerks and dressers are appointed by the visiting physicians and surgeons. From the large number of cases of acute diseases and accidents of varied character received, these appointments are valuable to students. Assistants are also appointed for the pathological department.

Fees.—The fees for Lectures, including hospital attendance necessary for candidates for the Diplomas of the English, Scotch, and Irish Colleges of Physicians and Surgeons, amount to about £80.

Royal Infirmary.—Fees : (1) Hospital attendance, dispensary, &c., perpetual ticket, £7 ; season ticket, six months, £2 2s. ; three months, £1 1s. Separate payments amounting to £7 7s. entitle a student to a perpetual ticket on returning previous season tickets. (2) Clinical instruction, six months, £3 10s. ; three months, £1 15s.

Dental Curriculum.—Students studying with a view to the dental diploma can obtain instruction in the following subjects : Physics, chemistry, anatomy, physiology, surgery, practice of medicine, and materia medica. The special dental courses may be obtained in the Dental School, of the Incorporated Glasgow Dental Hospital, 158 Renfrew Street, Glasgow. Particulars may be had from D. M. Alexander, Esq., Solicitor, 186 St Vincent Street, Secretary

Anderson's College Medical School, Glasgow.—Founded in 1800. The modern, excellently equipped buildings of this school are situated to the west of the entrance to the Western Infirmary, and within four minutes' walk of the University. Extensive laboratory accommodation is provided for practical anatomy, practical chemistry, practical botany, practical zoology, practical physiology, practical pharmacy, operative surgery and public health.

The various courses of instruction qualify for all the Licensing Boards in the United Kingdom, and for the Universities of London, Durham, Edinburgh, and Glasgow, under conditions stated in the calendars. The courses in public health (laboratory and lectures) are also recognised by the Universities of Cambridge, London, etc. Session opens 14th October, 1912. For syllabus, apply to the Secretary of the Medical Faculty, Anderson's College Medical School, Glasgow, W.

The Carnegie Trust pays the fees of students at Anderson's College on conditions regarding which particulars may be obtained from Sir W. S. McCormick, LL.D., Carnegie Trust Offices, Edinburgh.

Class Fees.—For each course of lectures (anatomy, ophthalmic medicine and surgery, aural surgery, diseases of throat and nose, mental diseases, and public health excepted), first session, £2 2s. ; second session (in Anderson's College), £1 1s. For practical classes (except anatomy, chemistry, and public health), namely, botany, zoology, physiology, pharmacy, operative surgery, first session, £2 2s. ; second session, £2 2s. *Chemistry.*—Lectures, £2 2s. ; practical chemistry, £3 3s. *Botany and Zoology.*—Reduced fees for lectures with laboratory work in botany or in zoology, during same summer session, £3 3s. ; for lecture class or practical class separately, in botany or in zoology, £2 2s. *Ophthalmic Medicine and Surgery* (including hospital practice), aural surgery, diseases of throat and nose, and mental diseases, fee for each course, £1 1s. *Anatomy Class Fees.*—Winter.—First session, lectures and practical anatomy, £5 5s. ; practical anatomy alone, £2 2s. Second session, lectures and practical anatomy, £4 4s. ; practical anatomy alone, £2 2s. Summer.—Regional course or special dental course (each including nervous system) and practical anatomy, £3 3s. ; regional anatomy course or special dental course alone, £2 2s. ; practical anatomy alone, £1 11s. 6d. ; osteology and practical anatomy, £2 12s. 6d. ; osteology alone, £1 11s. 6d.

Public Health Laboratory.—Fee for six months' course £12 12s. *Matriculation Fee.*—For the year, 10s.; for one class alone in winter, 5s.; for summer session alone, 5s.

Glasgow Western Medical School.—Owing to its situation in University Avenue (opposite the principal gate of the University and near the Western Infirmary), this school is conveniently placed for students desirous of taking extra-mural classes. Lectures and demonstrations are given, in the usual winter and summer sessions, on chemistry, anatomy, surgery, medicine, midwifery and gynæcology, ophthalmology and dermatology. Some of the classes qualify for graduation and for Scottish diplomas. The usual class fee is £2 2s. There is no matriculation fee. Further information may be obtained from the Secretary.

Glasgow Maternity and Women's Hospital.—This institution is of ancient foundation, but the present buildings, containing 104 beds, with a large out-patient department, were only opened five years ago. Erected with due regard for the most modern requirements, and staffed by physicians of reputation, it affords excellent facilities for acquiring a complete knowledge of the art and practice of obstetrics. There is also a students' residence in connection with the hospital, in which board and residence can be had at very moderate fees. Quarters are also afforded for lady students, board and lodging in the hospital costing but £1 7s. 6d. per week. The hospital fee is £5 5s. Full particulars from the House Superintendent.

Glasgow can boast of several other important medical institutions, such as the Western Infirmary, with a staff representative of the best in medicine and surgery of the second city of the Empire, and having no fewer than 500 beds. There is also the Victoria Infirmary, with 260 beds, in which leading specialities, such as ophthalmology, aural surgery, diseases of the throat, diseases of women, diseases of the skin, etc., are taught; the Glasgow Eye Infirmary, with 100 beds; the Royal Hospital for Sick Children, with 74 beds, etc.

SCOTLAND AND AN INCLUSIVE FEE IN MEDICINE.

The University of Glasgow has at present for its head, or Principal, the President of the General Medical Council. For one hundred and fifty years or more the Principal's chair at this University has been always filled by a clergyman, and Sir Donald Macalister is the first medical man who, in modern times at least, has held the position. It is quite fitting that Glasgow, which has for long been famous as a centre of medical education, should now have its University presided over by a member of the profession; but Glasgow, as a place for medical teaching, has owed not a little of its reputation to instructors whose lecture rooms were outside of the University, and in what are called the extramural medical schools. We have, however, begun this article by alluding to Principal Macalister, because he has seemed to be *facile princeps* in taking the leading part in Scotland in the movement for getting the Scottish Universities to adopt what is called an inclusive fee in medicine: that is a composite fee to be payable by a student (in five annual instalments) for his classes as a whole, instead of the separate fee at present payable for each class.

We have said that Principal Macalister has taken the leading part in Scotland in this movement, because the idea, so far as it can be traced, originated with the Treasury. In July, 1910, the Treasury, in announcing increased grants to the Scottish Universities, intimated that these would be made subject to two conditions, one of which was the institution of an inclusive fee, of uniform amount throughout the four Universities, for all the classes in each course of study.

To the Treasury's letter announcing the increased grant, the University of St. Andrews promptly replied, accepting the condition as to the institution of inclusive fees. No protest was made against the Treasury interfering with the internal administration of the University. Of course, in the case of St. Andrews, the question of an inclusive fee in medicine was not complicated by the presence of extramural lecturers, or, at all events, of any organised extramural school. It is to be noted that where extra-academical teachers exist, recognised by the University, a medical student has the option of taking, for graduation, one half of his classes with such teachers; paying for each class, to the teacher, the same fee as is chargeable for that class in the University. Thus, in the absence of any extramural school, the introduction of an inclusive fee was not so difficult at St. Andrews. Nevertheless, St. Andrews has reconsidered the matter, and has recently withdrawn from the position of accepting the inclusive fee system.

Now what are the advantages claimed by those who put forward the proposal for an inclusive fee in medicine? It is said that the medical student, instead of finding the cost of his curriculum increased as new classes are added to it, will have the total cost of his classes fixed, so that successive relays of students will all pay the same amount. This sounds well, from the point of view of the student, especially of the later student, who, unlike his earlier brother, may be getting something for nothing, namely, additional classes. But in the meantime there is a loss to his University, and if new compulsory classes are added, the inclusive fee would speedily require to be raised.

Again, it is said that an inclusive fee, payable as suggested, in yearly instalments, would equalise the student's payments for classes over the years of his curriculum, and obviate his having to pay, as he has at present, about two-thirds of his class fees in the first two of the five years of his course. This may be true; but if hospital fees, examination fees, etc., which bulk more largely towards the end of the student's curriculum, are taken into account, this argument is seen to disappear.

Following on the initial letter of the Treasury referred to, other correspondence between it and the Universities took place, in which the Treasury continued to urge upon the Universities the adoption of inclusive fees. In endeavouring to meet the wish of the Treasury, the courts of the four Universities held a conference in December, 1910, a second in January, 1911, a third in July, 1911, and a fourth in December of the same year. Little progress was made at these conferences in regard to arranging a uniform inclusive fee in Medicine, with which alone we are concerned. In fact, the proposal seemed so impracticable that Edinburgh University declined to attend a fifth conference, held on 20th June, 1912, at which, accordingly, only the other three Universities were represented.

The matter came before the General Councils of the Universities. At their meeting on 30th October, 1912, the General Council of Glasgow University passed a resolution protesting against the Treasury making the adoption of inclusive fees a condition of an increased grant to the Universities. Deputations from Edinburgh University and Glasgow University Councils proceeded to London to press this view on the Treasury and on Members of Parliament, pointing out what they considered to be an unwarrantable interference with the independence hitherto enjoyed by the Scottish Universities.

The special difficulty connected with the institution of an inclusive fee in Medicine in the Universities arises from the extramural schools and extramural teaching generally. Both in Edinburgh and Glasgow the extramural teachers have long been regarded as adding greatly to the efficiency and prestige of medical education in these places. But if an inclusive fee in medicine were adopted, which would be payable in every case to the University, the extra-academical teachers fear that it would have a tendency to make the student take all his classes in the University, notwithstanding any provisions that might be made for paying the extra-academical teacher out of the inclusive fee. It was only after years of severe struggle that the extramural schools obtained for the student the option of taking one-half of his classes outside of the University, and they naturally look with alarm and suspicion upon any interference with the student's present mode of paying his fees. The students themselves, through their representative councils, have expressed their particular desire that the extramural schools should not be injured. Notwithstanding that the Treasury has had pointed out to them that Lord Elgin's Committee on the Scottish Universities in their report (on which the Treasury proceeded) only suggested that "the institution of a composite fee deserves very careful consideration from the Universities of Scotland," the Treasury, from London, and Sir Donald Macalister, as, apparently, their advocate in Scotland, continue to press the adoption of an inclusive fee in medicine on these Universities, in total opposition to the views of Edinburgh University, of Edinburgh's large and well-equipped extramural Medical School, and of the Glasgow extramural schools. Now that the difficulties in the way of adopting the proposal have become apparent, and that St. Andrews University has also withdrawn its assent, perhaps the Treasury, looking further to the fact that Glasgow University Court is divided in opinion on the subject, will see the wisdom of withdrawing the pressure they are using, and thus close the chapter of interfering with the internal administration of the Scottish Universities.

Finally, it may be pointed out that for a student to be obliged to pay down the whole of his year's fees at one time, instead of, as at present, at the beginning of the winter and summer sessions respectively, would be to put a greater strain upon his resources, or those of his parents, and to disable him, in many cases, from taking extra or ancillary classes which he might otherwise have attended; and indeed might prevent him from proceeding with his studies altogether.

(END OF EDUCATIONAL NUMBER.)

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, September 6th, 1913.

Duodenal Ulcer

is not, so far, as familiar a form of disease as it is in England and America. In a paper delivered before the Aerbtlicher Verein, Frankfurt, Hr. Rosengart discusses the subject, and gives the reasons why in his opinion the disease is not such a household word here as it is in English-speaking lands. The speaker thinks the frequency of publications on the subject is due to the greater degree of specialisation that prevails in these countries, and especially in America. The centralisation of medical science has made greater progress across the Atlantic than in Germany. At the same time ulcus duodeni, he says, is much more frequently diagnosed in Germany than formerly. This was due to the completeness of diagnosis that had made itself evident during the last half-year. As said by Moynihan, there was no disease in which the symptoms were so typical, and the history was always of most extreme importance. The most remarkable symptom was the periodicity of the pain. The patient complained usually of trouble of very long standing. After a free interval, during which the patient felt well, the trouble came on suddenly and often lasted a long time, a sense of oppression, a feeling of pressure and heaviness in the epigastrium, and finally the characteristic pains, mostly to the right of the middle line, coming on about two hours after food, and slightly relieved by taking food afresh. Identical with this "hunger pain" was that which came on in the night. The objective symptoms were pain on pressure at the upper end of the right rectus muscle outside the middle line. There were occult bleedings per rectum, but these might be absent. The speaker had frequently found hypersecretion, in one case the so-called "twelve-hour remainders." Radiological examination was of great importance. The stomach generally appeared to be small and hypertoned. The stomach contents passed rapidly into the duodenum; the horizontal part appeared to be widened. The period of emptying, as well as the passage through the intestines, was generally shortened. According to Kreutzfuchs, the rapid emptying of the stomach (insufficiency of the pylorus) was due to increased secretion in the duodenum. Occasionally a Haudeck or Nischen symptom could be seen like bismuth outside the normal shadow of the duodenum; this pointed to perforated ulcer. During the last six months the speaker had met with 19 cases of the disease.

Hr. Güntzburg confirmed in general what had been stated by the reader of the paper. But he would observe that in his last 21 cases, in eight of which the diagnosis was confirmed either by operation or necroscopy, he had determined the fact of frequent occult hæmorrhage almost in every case. The chemical conditions of the gastric secretions were many-sided, but there was mostly hypersecretion. The duodenal sound mostly confirmed the conclusion of Kreuzfuchs that the disturbance of the acid reaction was due to the hypersecretion of the duodenum.

At the Gynæcological Society, Hr. Wolff related a case of

Rupture of the Uterus in a Cicatrix from a Case of Cervical Cæsarean Section.

The patient was a woman with a flattened pelvis, who had been delivered by cervical Cæsarean section. Two years after she again became pregnant. The os uteri dilated badly. After an hour the child's heart could not be heard, and its small parts could be plainly felt just under the skin. The patient's pulse became bad, and hæmorrhage appeared from the vagina. Laparotomy was now performed, when it appeared that rupture of the uterus had taken place in the line of the old cicatrix in the cervical portion. Microscopical examination showed that instead of muscular tissue the elastic fibres in the part were very plump and thick; the decidua reached to the serosa. It had been thought that union had taken place by first intention, but the finding of some old catgut sutures showed that that had not been the case. The insertion of the placenta near to the cicatrix was a point of importance. Inquiry into the literature of the subject had brought to light 48 such cases with 12 deaths.

Hr. Siegwart had operated in five similar cases. He believed that one should operate at once, and not wait until fœtal parts could be felt.

Hr. Bröse doubted whether the case had been one of cervical Cæsarean section at all. Hr. Jolly pleaded for sterilisation in every case of Cæsarean section.

Hr. Strassmann was of opinion that the knots of the sutures should be placed in the inside. When the sutures were extraperitoneal the peritoneum should be drawn over them and the knots turned in, as in the case of the Lembert suture.

Professor Bumm (the Chairman) did not consider the danger would be very great even if a cicatrix did give way.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

FRENCH DRAINS AND MALODOROUS FRANCE

To the Editor of The Medical Press and Circular.

Sir,—My card, which I enclose, will tell you that I am a frequent traveller and sojourner in France, and that I am particularly well able to appreciate the value of the editorial paragraphs under the above headings printed in your current number. It is amazing that this question, which is constantly being thrust before the eyes of newspaper correspondents in France, is practically ignored by the entire British

Press. The policy of pinpricks has long given way to the *entente*, and it seems that the neighbours, fearful to weaken their close friendship, are averse to offering any criticism in the least likely to wound each other's susceptibilities. No better service could, however, be done to France than the forcing to the front of the question of national hygiene, and if you, Sir, can arouse the interest of British Chambers of Commerce in France, and make it known that serious attention is being directed to it in England, you may put under an obligation all truly patriotic Frenchmen. It is the apathy of the French people that needs overcoming. The whole problem was expounded at the Congress of Hygiene in Paris in May last. The proceedings were reported in brief telegrams to the *Times*, but were not editorially noticed there, and were practically disregarded by other leading English journals. The most remarkable speeches were those delivered by M. Léon Bourgeois and M. Ribot, both ex-Prime Ministers. They viewed the question mainly from the patriotic standpoint. They both dwelt upon the necessity for France to maintain the numbers and quality of her populace. They both pointed out that the population remains stationary owing to the universal practice of restricting births, and they both laid stress upon the fact that the high comparative death-rate not only kept down the numbers, but implied lowered stamina in great masses who had survived the ordeal of infantile disease. It was further pointed out that the comparative mortality from tuberculosis and typhoid in Paris was three times greater than that of London, and at least twice as great as that of Berlin. The rate for deaths from tuberculosis in France was 22 per 10,000; in England and Germany this rate had fallen to 11. The general mortality in France was given as being from 18 to 19 per 1,000, while in England, Holland, and the Scandinavian countries it had fallen to about 14 per 1,000. M. Ribot, after fully describing the danger into which the nation must fall owing to the almost complete stoppage of its numerical increase, ended his speech with the following words: "This country is sick and it ought to be proclaimed aloud. The French race is withering. The people must be informed of the peril by which it is menaced. All the efforts of the Legislature and of the Government must be concentrated upon grappling with this peril."

If the almost complete disregard of public sanitation throughout France, the birthplace of Pasteur and a whole race of famous scientific hygienists, causes astonishment, it is difficult to decribe the feelings aroused in the minds of those who inquire into things that lie below the surface in "La Ville Lumière"—Paris. Every Parisian, from the humblest workman upwards, is proud of the architectural splendours of his city, and is willing to make any sacrifice to preserve and enhance them. He is quite insensitive to the fact that from the hygienic point of view his beloved city is a veritable whited sepulchre. London, on the other hand, is magnificent or beautiful only by accident. From the artistic point of view it is marred throughout by the hand of the Philistine. From the point of view of health it is immeasurably superior to Paris. London has an incomparably superior sewage system, and a water supply ample for its vast population and virtually of complete purity. The water supply of Paris is lamentably deficient and even far from safe from pollution. Paris more than any other similar city, sets the example to the whole country of which it is the capital, and the description which you give of French hygiene throughout errs only by its extreme moderation. The sanitary conditon of many French towns is at least in some respects, worse than mediæval. In the olden days the latrines and privies lay outside the houses. Now they are placed inside, and the whole apparatus serves to carry into and diffuse through the houses new and old fœtid gases given off in the closets and generated in the cesspools and sewers with which they are connected. It would be a nice question to discuss whether an acute artistic sensibility or a keen appreciation of cleanliness and health denotes the higher civilisation, but there cannot be any doubt that in the loftier or lower senses of the word it would pay France to raise herself in this matter of public hygiene at least to the level of her neighbours.

I am, Sir, yours truly,
ANGLO-FRANCAIS.

Hotel Metropole,
Northumberland Avenue.
September 5th, 1913.

THE MEDICAL PROFESSION AND TRADES UNIONS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The letter from a "Member of the B.M.A." in your issue of September 3rd appears to be written under a slight misapprehension of the actual state of matters. He assumes that the question of recasting the British Medical Association on trades union lines has been thrown out by the vote of the Representative Meeting at Brighton. This inaccuracy mars the effect of an otherwise clear and valuable communication. The truth of the matter, of course, is that the veto of the Representatives is inoperative without the express sanction of the members, in whom is vested the right of final decision. Were this not the case, members would find themselves in the intolerable position of having their subscription raised from twenty-five shillings to two pounds per annum, in accordance with *another* decision of the Representatives at Brighton.

As to the spirit of trades unionism, it is already ingrained in the constitution of the Association. As pointed out in your excellent leader a few weeks since, it is futile to swallow the principle and to shrink from the title. After a somewhat prolonged experience of the medical world I must, for my own part, bewail the absence of so fine a piece of protective machinery as that which characterises the average trades union. Why should not the rate of fees be settled by a central body? Why should it be open to men careless of the honour of their fellows to take threepence or sixpence for medicine and advice? Why should not the position and the privileges of specialists and of consultants be clearly defined? Why should one man be permitted to advertise his name boldly by writing to the leading daily newspapers upon medical subjects while an obscure private practitioner is faced with all the terrors of the General Medical Council if he stray ever so slightly in a similar direction? The cardinal attractions of trades unionism to me are (1) the absolute impartiality of the adopted laws, (2) the framing of those laws by the consensus of opinion of the majority, (3) the advancement of common interests on sound, sensible, commonsense and intelligible grounds.

Much more could be written on this theme, and I trust that some more of your readers will give us their views. Many medical men are inclined to read and to listen rather than to write and to speak—a fact that lessens our chances of self-development to no small extent. May we hope for the emergence of some "mute, inglorious Milton" as the leader of the future medical revolt—whether or not that may have the name of trades unionism inscribed on its banners?

I am, Sir, yours truly,
ANOTHER MEMBER B.M.A.

South London.
September 6th, 1913.

OBITUARY.

MR. ANDREW CLARK, OF UXBRIDGE.

WE regret to record the death of Mr. Andrew Clark, D.Sc. (Hon.) Oxon., F.R.C.S., Honorary Surgeon to the King, which took place on the 29th ult. at Folkestone, at the age of 66. The deceased, who lived at Cowley Grove, Uxbridge, was the son of Benjamin Clark, F.R.C.S. He was educated privately and at University College, London, becoming L.S.A. in 1868, and F.R.C.S. in 1873. After holding the post of Obstetric Assistant at University College Hospital, he became attached to the Middlesex Hospital as Surgical Registrar, Lecturer on Surgery, and Tutor in the Medical School. He was Consulting Surgeon to the Hospital, as well as to the St. Marylebone General Dispensary and the Eastbourne Convalescent Hospital at the time of his death. Mr. Clark was a Colonel in the Army Medical Service (Territorial Forces), and a Knight of Grace of the Order of St. John of Jerusalem. He was a Vice-President of the British Medical Association, of which he was the recipient of the gold medal awarded for distinguished merit in 1905. He had also served as Chairman of the Council and President of the Metropolitan Counties Branch. Mr. Clark was the author of the Middlesex Hospital Surgical Reports, 1872-4, and of "Ambulance Lectures," which appeared in 1888, and edited the fourth edition of "Fairlie Clark's Manual of Surgery."

REVIEWS OF BOOKS.

GLYCOSURIA. (*a*)

We have read this book with great interest. Although some 460 pages are devoted to one disease, or disease group, there is no "padding," and every sentence is of value. The book opens with a description of the carbohydrates, their detection, differentiation, and quantitative determination. In addition, we are informed regarding estimations of total nitrogen, ammonia nitrogen, and other procedures which may be necessary in the full elucidation of a case.

The various forms of glycosuria, experimental, transitory, alimentary, intermittent and persistent, are next dealt with. There is a full account of the symptoms, prognosis and treatment of the latter. There are tables of dietaries with their equivalents in carbon, nitrogen and energy values. These should be of great service since, as the author very properly remarks, to give a patient a list of what to eat and what to avoid is really to do very little for him. The closing section deals with the less common carbohydrates which may occur in the urine, and there is an appendix on the chemical properties and reactions of carbohydrates and related substances. It is all well done. The book makes it abundantly evident that the treatment of a diabetic patient is not to be lightly undertaken, but a study of its pages will be a great help in dealing with a case. We cannot recall a book with a larger number of mercilessly split infinitives.

OBSTETRICS. (*b*)

This is a fine example of the modern text-book—a good style, beautiful and abundant illustrations, and well bound. The author is not an extremist, and his opinions are tempered with much common sense. He advocates as few vaginal examinations as possible during labour. The perineum is best protected not by pressure on it, but by keeping the head well flexed. Unlike Hirst, he advocates immediate suture of all lacerations. Eclampsia is well discussed, but very little space is given to the conservative methods which have proved so valuable at the Rotunda and elsewhere.

We are glad to see that Dr. De Lee emphasises the fact that in placenta prævia the cervix is very sodden, and therefore the risks of tearing it are very real when rapid dilatation or delivery is performed. The chapters on contracted pelvis are very good, but Skutsch's pelvimeter hardly warrants dismissal in a couple of words. For its purpose it is the most accurate instrument we possess. The author advocates, in all but extreme degrees of contraction, a watchful expectancy, forceps being used if necessary. Pubiotomy is to be employed in selected cases, but on the whole Dr. De Lee is not enamoured of it. He uses forceps for the after-coming head in breech cases.

We are glad to see that the bougie method of inducing labour does not get unqualified approval. At the best it is unsatisfactory. He discusses puerperal sepsis in very conservative fashion. Routine douching and the use of the curette are condemned. This section was apparently written before the latest British papers were published on the use of vaccines, and this method of treatment is not adequately treated. One would have expected more in a book of the size on a topic of increasing interest such as the operative treatment of puerperal sepsis, especially ligature of the thrombosed veins.

Thorough exploration of the breast through one incision is recommended for mastitis, and this is really the only treatment worth considering after pus formation.

It is surprising how little known is such a useful instrument as Carton's mucus extractor. It is far superior to any of the tracheal catheters which usually figure in text-books.

These minor criticisms do not detract from our admiration of this monumental work. It represents the best American teaching, and it must be for some time the last word in obstetrical literature. There is a wealth of detail in the description of operative procedures which is usually omitted from such books. The author makes full use of illustrations, which are of a high degree of excellence.

SEA-WATER INJECTIONS. (*a*)

This is the title of a book published by the Scientific Press, and is the work of Drs. A. G. Sandberg and D. M. Tudor, and is intended as a primer for practitioners desirous of learning about sea-water injections, and will be found of special advantage to those who are too far removed from centres where other tuition may be obtained. The number of conditions that seem to be amenable to this kind of treatment appear to be numerous and various, and are not limited, as the prevailing idea of the majority of medical men implies, to that of infantile diarrhœa. Amongst the various chronic diseases which have apparently yielded to its sway are psoriasis, eczema, acne, marasmus, lupus, etc. The small book deals with the collection and preparation of sea water, following which is a detailed account of the *technique* of it manipulation in the applied cases. The records of cases seem to prove conclusively its general utility, and the authors' advice is that the medical practitioner should by preference gain a practical knowledge of the method at the Quinton Polyclinic, London, or visit the Dispensaries Marins in Paris. The volume should prove of immense service as a practical guide to this comparatively new system of treatment.

PERICARDIAL EFFUSION. (*b*)

The treatment of pericardial effusion must ever remain a subject of urgent practical importance. In cases of large collections of fluid suddenly collecting, as sometimes occurs, there must inevitably be extreme danger of fatal syncope. And as the fluid collects—in obedience to the simple law of gravitation—from below upward, while the tense pericardial sac is very easily reached through the epigastrium, the practical inference is obvious. Very thin tendinous strips ("anterior crura") connect the diaphragm with bone at the xipho-sternal junction; and there is even a "cellular" interval on either side of the same between it and the adjacent attachment of the phrenic fibres to the circumference of the costal arch. Thus the distended pericardium is much more easily reached here than anywhere else, as every skilled anatomist knows. The present writer's practical standpoint is: "Nous estimons qu'il est du devoir du praticien d'intervenir *toujours et sans délai* dans toutes les péricardites avec épanchement." There can be no question as to the critical position of the patient who has to oppose his vital powers to the mechanical drag imposed by a considerable pericardial effusion, and the ever imminent danger of syncope. It is of interest that the procedure of *péricardotomie sous-cost-épigastrique* was first described in 1798 by Larrey, the deservedly celebrated surgeon

---

(*a*) "Glycosuria and Allied Conditions." By P. J. Cammidge, M.D. London: Edward Arnold. 1913.

(*b*) "Principles and Practice of Obstetrics." By J. B. De Lee, M.D. Illustrated. Pages 1,060. London: W. B. Saunders Company. 1913. Price 35s. net.

(*a*) "Isotonic Sea-Water Injections." By Arthur G. Sandberg and Dorothea Mary Tudor. London: The Scientific Press.

(*b*) "Les Epanchements du Péricarde. Etude Clinique et Thérapeutique. La Fonction épigastrique de Marfan." Par le Docteur Germain Blechmann. Paris: J. B. Baillière et Fils. 1913.

whom Napoleon referred to in his last will and testament as the best man he ever knew. The fact, too, that a famous Irish scientist of the past generation (Dr. Samuel Haughton, F.T.C.D., F.R.S.) promulgated the thesis that the premature death on the cross was due to such pericardial syncope, as evidenced by the "blood and water" which escaped through the spear-wound may here interest explorers in the byways of knowledge.

GYNÆCOLOGY. (*a*)

THE popularity which has been accorded this work is well deserved, and this edition, which is the fifth since 1905, like its predecessors will enjoy marked favour. In it is found what one might call a treatise on the most healthful costumes which a woman should wear and on the most suitable gymnastic exercises in which a woman should indulge, in order to remain healthy: this treatise might with advantage be issued in pamphlet form for the benefit of laywomen.

From a student's point of view the descriptions of the normal position of the uterus, and the definitions of version and flexion are too complicated, and we cannot urge too strongly the adoption of a standard for these over-discussed matters. The author advises ventral fixation or supravaginal hysterectomy with fixation of the cervical stump as the operative treatments for prolapse of the uterus. He prefers mechanical means of support for those still in the child-bearing period, and wisely points out that these latter women must be rendered sterile when ventral fixation is performed. We marvel that he deems such well-known operations as shortening of the utero-sacral ligaments, and interposition of the uterus, unworthy of notice. Baldy's operation is the one of choice for backward displacements.

All observant gynæcologists will welcome Dr. Ashton's opening sentence in the discussion of the "Treatment of Myomata":—"I am of the opinion that the majority of uterine fibromata demand removal." All the various treatments of uterine fibroids are discussed, and those who have seen malignant degeneration follow palliative treatment will feel pleased with the dictum: "The X-rays should not be employed in the treatment of uterine fibroids except when an operation is contraindicated, either on account of the physical condition of the patient or her refusal to submit to radical measures." Dr. Ashton is convinced of the danger of cancer following laceration of the cervix, and recommends examination and suture if necessary within three or four months of labour as a palliative measure. He adopts the abdominal route when the disease is present, but he considers that "it is only in the early stages when the disease is limited to the uterus that hysterectomy is indicated, and if the vagina, the rectum, the bladder, the broad ligaments, or the cellular tissue of the pelvis is involved, a radical operation is useless." In our opinion it is fortunate that there are many who will operate even at such a late stage.

All the text is most systematically tabulated and makes easy reading. The volume, which is large, well bound, and profusely illustrated, will be found most useful as a reference book on any subject of gynæcological interest to the specialist, the general practitioner and the student.

THE MODERN HOSPITAL. (*b*)

THIS volume is an excellent illustration of the American genius for skimming the cream of the results of scientific research and utilising the same in the improvement of the naturally somewhat bitter beverage supplied to humanity in the cup of daily life. The authors disarm the reviewer of his critical asperity by announcing their "appreciation of its many shortcomings and of its unfinished character." But we can encourage them by stating our own with corresponding promptitude. The examination of the architecture, ventilation, drainage, and furniture of the twentieth-century hospital is carried out with a thoroughness and perspicacity which are thoroughly worthy of the highest ideals of the healing art. The authors indicate that their "book has the tremendous weakness of being a record almost wholly of the experiences of two men," which would, at first sight, imply a supererogatory display of modesty. But they hasten to add the following philosophic reflection, which we cordially appreciate: "In justification, it may be urged that the history of mankind is a composite of individual life stories, and it is only an infinitesimal number of these millions of members of human society who have here ventured to record their own experiences, not in the hope of permanent fame or glory, but merely with the hope that there may be contained within its pages some new thought, or some old thought clothed in new garb, that may help some perplexed and tired worker; and if this shall come to pass the book will not have been written in vain." We have pleasure in ranging ourselves on the side represented by this expression of view-point, and gladly embrace the opportunity of pointing out that the present structure of the whole healing art, as adaptable to immediate human needs, is not "a composite of individual" experiences and the opinions based thereon; and that the present unsatisfactory state and rate of clinical practice and progress are largely due to the persistent ignoring of that very fact which has so adhesively accompanied the rapid advances of materialistic speculation and mechanical discovery and invention throughout their grossly illogical generations.

The mention of "articles made by individuals and firms, and the names and addresses" is, of course, more Chicago-like than we are accustomed to in the British Isles; and the authors take care to announce in the preface that "not one single dollar has been paid by anyone," while the reader has "an unquestionable right to all the information at the authors' disposal." We have perused this largely comprehensive volume with both profit and pleasure, and cordially recommend it to the attention of all specially interested in hospitals.

SURGERY OF THE STOMACH. (*a*)

THIS is a well-written volume on a subject which is unquestionably very prominent "in the public eye" of the present generation—even of the lay section, as well as of the surgical. The facts which our author emphasises are that "The stomach is affected with cancer more frequently than any other organ of the body, and yet partial gastrectomy is one of the uncommon operations of surgery." Indisputably true, then, is the reflection: "The saddest and most discouraging part of the work of a surgeon is the frequency with which he sees patients suffering from cancer so advanced that the time for a radical operation has gone for ever. Especially is this true of gastric cancer. In less than five per cent. of the cases I see is a radical operation possible." Every practitioner of experience knows that this appalling picture represents all too accurately the dismal facts in question; and this state of things, which should not exist, must, we should say, surely come to an early termination in the present state of surgical science and of popular intelligence.

On the rather curious and still decidedly obscure clinical entity of duodenal ulcer the author is very interesting, even if not always satisfactorily illuminating. One of the curious cases of his own experience was that of a lady who suffered severe recurrent attacks of hæmatemesis and melæna. On opening the abdomen he "found an enormously large appendix measuring $3\frac{1}{2}$ inches in diameter, and containing three large foul-smelling concretions." (!)

(*a*) "A Text Book on the Practice of Gynæcology for Practitioners and Students. By Easterly Ashton, M.D., LL.D. Fifth Ed. Pp. 1,100. Philadelphia: W. B. Saunders Co. 1912. Price 27s. 6d. net.

(*b*) The Modern Hospital, its Inspiration, its Architecture, its Equipment, its Operation." By John Allan Hornsby, M.D., and Richard E. Schmidt, Architect, Fellow American Institute of Architects. With 207 illustrations. Philadelphia: W. B. Saunders Company. 1913.

(*a*) "The Surgery of the Stomach: A Handbook of Diagnosis and Treatment." By Herbert J. Paterson, M.A., M.C., M.B. Cantab., F.R.C.S. With plates. London: James Nisbet and Co., Ltd. 1913.

A year later he re-opened the abdomen on account of the recurrrence of the symptoms mentioned, "and on this occasion found a well-marked indurated duodenal ulcer adherent to the liver." He concludes that "a superficial ulcer, which could not be felt, existed at the time of the first operation." Such cases are pre-eminently worthy of special record, as they tend, by their collective statistics, to prepare the surgeon for the unexpected, and even the startling, on laying open the abdominal cavity—even when the prevalent symptoms were of the very ordinary and commonplace.

OPHTHALMOLOGY. (*a*)

In this volume diseases of the eyelids are first considered, and many of the commoner affections here discussed are of much interest to the general practitioner who may be called on to treat them. The next section deals with injuries of the eyes, in the course of which the subject of sympathetic ophthalmia comes under review. We are much surprised to find no mention is made of the value of large doses of sodium salicylate in the treatment of this grave condition. Fortunately, the translator has somewhat remedied this omission by including a footnote in which he mentions this fact. Under this section also there are included several paragraphs in which the medico-legal aspects of eye injuries are discussed. But perhaps the most important eye condition dealt with in this volume is glaucoma, just over sixty pages being devoted to this subject. In view of the full manner in which the matter has been treated, it is amazing that nothing is said about the newer sclerectomy operations recently advocated. It is a pity the translator has not seen fit to introduce some remarks on the matter. Among the other conditions reviewed are diseases of the vitreous, sclera, lachrymal organs, and orbit. The concluding chapter on muscular or concomitant strabismus is excellent, and we can heartily support the author's earnest plea for the early treatment of strabismus. We also note with pleasure that he does not advocate operation without giving a prolonged trial to more conservative measures.

The most serious faults of this work seem to lie in errors of omission rather than in those of commission, and in the failure of the author to recognise that advances in ophthalmology may originate in countries other than his own. We cannot congratulate the author on the illustrations, several of which might with advantage have been left out. The translator has carried out his work well, and it is difficult to realise that the book is not in the original.

LEWIS ON CLINICAL ELECTRO-CARDIOGRAPHY. (*b*)

The author offers to the medical profession an account of clinical electro-cardiography "with the conviction that this new method of examination has become essential to the modern diagnosis and treatment of cardiac patients." We are already familiar with Dr. Thomas Lewis's convictions, but until a concise manual appears in language which is intelligible to the average medical reader who is unacquainted with the detailed procedure of this special method, we feel that it will not assume the popularity which it should. The present work forms an excellent manual of directions for the physician who contemplates setting up an electro-cardiographic station, or for a medical man recently placed in charge of an electro-cardiographic department. To the average practitioner, however, its utility is not as obvious, and we think that the author in various places is inclined to be too dogmatic in his interpretation of phenomena which are as yet *sub judice*. We have nothing but praise, however, for the beautiful electro-cardiograms with which the book is copiously illustrated, and we congratulate the publishers on the careful and clear manner in which the illustrations have been reproduced. The first chapter is devoted to details concerning the connection of the patient with the string galvanometer, and the method of obtaining and of checking the accuracy of standardised curves. Chapter II. deals with physiological auricular and ventricular "complexes." The rest of the book has to do with anomalies in the form of the electro-cardiogram and with the main types of disordered heart action, in which it is now universally acknowledged that electro-cardiography gives indications unattainable in many cases by the use of other methods. Such conditions are auricular-ventricular heart-block, premature contractions, simple paroxysmal tachycardia, auricular "flutter" and fibrillation, and disturbances due to variation in rate of impulse formation at the physiological pace-maker—*e.g.*, respiratory arrhythmia and the like. The relationship of cardiography to various of the valvular diseases of the heart receives brief notice in the final chapter.

A STITCH IN TIME. (*a*)

In this small volume will be found, carefully indexed, a large number of minor casualties which are apt to occur in domestic life, with the appropriate first-aid treatment for each simply and concisely described. As far as possible technical terms are avoided, and the remedies suggested are those which are generally found in every household. The directions given should be readily understood by persons with no medical knowledge, and, as a rule, they are safe. We would suggest, however, that a caution regarding the inflammability of kerosine oil, recommended as an application for "lice," be added in a future edition to the directions for dealing with that affection. The book is a reliable guide to the first-aid treatment of minor and trivial ailments, and it is worthy of a place in every home.

MEDICAL TECHNIQUE. (*b*)

We do not know any other work of precisely the same scope as this of Dr. Albert Morrow's. Omitting all reference to surgical operations, he gives a description of the various technical procedures required in diagnosis and treatment. The book is, therefore, not a handbook of diagnosis, nor yet of treatment, nor is it concerned with the technique of the laboratory any more than with that of the operating theatre. The best idea of its intention can, perhaps, be given, by selecting at random a few items from the table of contents. Thus, under the heading of "Exploratory Punctures" (Chapter ix.), we find references to—exploratory punctures in general, and, in particular, of the pleura, the lung, the pericardium, the peritoneal cavity, the liver, the spleen, the kidneys, the joints, and the spinal canal. Again, Chapter xv., on The Stomach, has the following sub-headings:—Anatomic considerations, diagnostic methods, inspection, palpation, percussion, auscultation, inflation, extraction of contents, test of motor function, test of absorption power, gastrodiaphany, gastroscopy, skiagraphy, exploratory laparotomy, therapeutic measures, lavage, the stomach douche, gavage, massage, electrotherapy. In the chapters dealing with other matters the treatment is as full.

It will be seen that a book of the scope of Dr. Morrow's has the possibility of much usefulness. Success will depend on his manner of treating his subject. It is sufficient to say that the descriptions of the various procedures, though necessarily brief, are lucid and orderly, and, as far as may be, complete. Some space might, it is true, have been saved for more useful purposes by omitting the 65 pages dealing with the administration of general anæsthetics. It is impossible to treat such a subject satisfactorily

---

(*a*) "Text-book of Ophthalmology." By Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. Translated by Dr. Matthias Lanckton Foster, Member of the American Ophthalmological Society. Vol. II. London: Rebman, Ltd.

(*b*) "Clinical Electro-cardiography." By Thomas Lewis, M.D., D.Sc., F.R.C.P. Pp. viii. and 120, 103 Figures. London: Shaw and Sons. 1913.

(*a*) "A Stitch in Time: Simple and Practical Remedies, and Suggestions for use when a Physician cannot be immediately secured, and in Cases Considered too Trivial for Professional Care." By a Roosevelt Hospital Graduate Nurse and a Grateful Patient. Pp. 75. G P. Putnam's Sons: New York and London. 1912. Price 3s. 6d. net.

(*b*) "Diagnostic and Therapeutic Technic, a Manual of Practical Procedures Employed in Diagnosis and Treatment." By Albert S. Morrow, A.B., M.D. Pp. 775, illustrated Philadelphia: W. B. Saunders Co.

in a single chapter of a work of this kind. On the other hand, the chapter dealing with the collection of pathological material ought to be of service to the general practitioner, to whom such duty frequently falls. At present he too often spoils much good material, and defeats his own ends by his ignorance of technique. Dr. Morrow's directions how to obtain material from the uterus are not satisfactory. He warns against inserting a pipette past the cervix, forgetful of the fact that the contents of the cervical canal may differ widely from those of the uterus. His illustrations, too, of vaginal and rectal examinations are open to the criticism that the operator is depicted without gloves.

The book, on the whole, is one of the most useful we have recently met, and we can warmly recommend it to the physician and the general practitioner.

CONSUMPTION. (a)

The bibliophile of a hundred years hence will, we fear, be not a little embarrassed when he comes to deal with the works on tuberculosis published in the early part of the twentieth century. Should such a one be tempted to make a collection of books on that subject he would find his shelves crowded beyond endurance, and if he unwisely attempted to read them, in order to make a selection of what was most deserving of preservation, he would be bewildered by the multiplication of words and disappointed at the paucity of ideas. Reiteration, however, is one of the effective instruments in the hands of the teacher, and we presume that, till the public have learned their lesson and taken the necessary steps to stamp out tuberculosis, the teachers must continue to reiterate their warnings and instructions. We trust the lesson will soon be learned. While speaking thus of the subject we have no desire to belittle the treatment of it by Dr. Thompson, who has given us quite a good summary of our knowledge, and one which will no doubt serve its purpose of assisting the general practitioner to do his share of the work of stamping out the disease. If there is not much new knowledge in the book, it is because there is not much that is new to put in it, and at all events the old is dressed in an attractive form. We have some doubt as to the wisdom of advising the general practitioner to prepare his own dilutions of tuberculin. In this matter accuracy is of great importance, and accuracy is not readily attained in such matters without considerable practice. It is questionable too if there is any great saving of expense, as the dilutions are apt not to keep well.

LITERARY NOTES.

A useful little book for students of first aid is "A Compendium of Aids to First Aid" (Bale, Sons and Danielsson, Ltd.), by Dr. N. Corbet Fletcher. In a preface by Dr. James Cantlie it is stated that this pocket guide is not intended to supplant the study of text-books, but to concentrate the knowledge thereby gained for practical application in times of emergency. With this special end in view, Dr. Fletcher has adopted a most ingenious system of "tips," which head the various sections. Thus "clip" is the tip for remembering the different varieties of wounds—contused, lacerated, incised, punctured; while "Broad Street Special" is designed to assist the memory in the treatment of insensibility. Those who believe in the virtues of mnemonics will do well to obtain this excellent little handbook, which will be a godsend to many lecturers and candidates in first aid.

* * *

Those of our readers who are familiar with the German language and who wish to keep themselves informed of the latest ideas with regard to the pathology and treatment of internal medical disorders, cannot do better than study the ten volumes of "Spezielle Pathologie und Therapie innerer Krankheiten," published by Hrn. Urban and Schwarzenberg (Berlin and Vienna), three numbers of which we have received. The editors are Prof. Dr. Friedrich Kraus and Prof. Dr. Theodor Brugsch, of Berlin, assisted by one hundred of the most eminent specialists. Each issue contains several selected articles, in monograph fashion, by experts, but these are not so unwieldy as the classic encyclopædias of Nothnagel and Ziemssen. Special prominence is given to clinical observation and treatment, and copious bibliographies appear after each article. There are numerous coloured plates and photographic illustrations. The price of each number is 2 marks.

* * *

The first number of the *British Journal of Surgery*, recently issued, is an imposing quarterly symposium embodying all that is best in British surgical art and science. A good photograph of Lord Lister very aptly forms the frontispiece, while among the distinguished contributors are Messrs. Albert Carless, D'Arcy Power, David Newman, Sampson Handley, G. E. Gask, H. Morriston Davies, Robert Jones, and S. Alwyn Smith. In a foreword Sir Rickman J. Godlee expresses the opinion that the new journal will prove a medium through which British surgeons can make themselves intelligibly heard. That it will rank side by side with the great foreign annals and archives of surgery is evident after a perusal of the first number. Sir Berkeley G. A. Moynihan is the chairman of the Editorial Committee, and Mr. E. W. Hey Groves (Bristol) is the Editorial Secretary. The publishers, Messrs. John Wright and Sons, Ltd., Bristol, are to be congratulated upon the excellence of the type and the illustrations. Single numbers are 7s. 6d. net, and the subscription price is 25s. net per annum. We heartily wish the journal all the success it deserves.

NEW PREPARATIONS.

From Messrs. Reitmeyer and Co., 63 Crutched Friars, E.C., we have received a pentad of interesting and valuable preparations, manufactured by Dr. Walter Wolff and Co., Elberfeld. Of these

METAFERRIN

is an organic preparation containing 10 per cent. each of iron and phosphoric acid, fixed in digested milk albumen, put up in 4-grain tablets, which are rapidly soluble in water. Metaferrin may be given in all cases where a course of iron is indicated.

ARSENO-METAFERRIN

is not a mixture of arsenic and metaferrin, but a derivative of the latter containing 0.1 per cent. of arsenic in organic combination. Neither of the two chief ingredients are separated by the gastric juice, hence arseno-metaferrin is well tolerated. This preparation will be found useful in anæmic conditions and also in obstinate skin cases.

IODO-METAFERRIN

consists of 7.5 per cent. of iodine in organic combination, an equal proportion of iron, and 8 per cent. of phosphoric acid. Experimental research has demonstrated the superiority of iodo-metaferrin over iodo-iron preparations as regards slow and uniform excretion, and it has also the advantage of being well tolerated, permanently stable, tasteless, and stimulates the appetite.

ROMAUXAN

is a nutritive preparation containing iron, phosphorus, and a high percentage of digested milk albumen. It has the advantage of not upsetting the digestion, and it dissolves readily in the intestine. As a body builder in debilitated states it may be taken in teaspoonful doses three times daily. One ounce of this excellent food costs tenpence.

TRICALCOL

is tricalcium phosphate, combined with milk albumen, in which the phosphate exists as a colloid in the proportion of 20 per cent. Its lime is more readily absorbed in the intestines than the lime of cow's milk, and in view of the fact that lime-salts have been recommended as a prophylactic against tuberculosis, tricalcol would seem to be an ideal preparation to administer in anæmic states and also in pregnancy, as well as in rickets. A one-ounce packet costs 1s. 3d.

(a) "Consumption in General Practice." By G. Hyslop Thompson, M.D., D.P.H., Medical Superintendent, Liverpool Sanatorium. 8vo., pp. xvi. and 335. London: Henry Frowde and Hodder and Stoughton. 1912.

MEDICAL NEWS IN BRIEF.

Opening of the Medical Schools.

Charing Cross Hospital.—Lady Wantage will distribute the prizes in the Out-patients' Hall of the Hospital on Wednesday, October 1st, at 3.30 p.m.

St. George's Hospital.—Sir William Osler, Bart., F.R.S., Regius Professor of Medicine in the University of Oxford, will distribute the prizes and deliver the opening address on October 1st, at 3 p.m.

St. Bartholomew's Hospital.—The annual Old Students' Dinner will be held in the great hall of the Hospital on October 1st, at 6.30 for 7 p.m., Dr. Howard H. Tooth, C.M.G., in the chair.

St. Thomas's Hospital.—The annual Old Stulents' Dinner will be held at the Hotel Cecil on October 1st at 7 for 7.30 p.m., Dr. H. P. Hawkins presiding.

St. Mary's Hospital.—Sir John Prescott Hewett, K.C.S.I., will distribute the prizes and awards for 1912-13, and deliver an address on October 1st, at 3.30 p.m. On October 7th the annual dinner of past and present students will be held at Prince's Restaurant, at 7 p.m.

Middlesex Hospital.—The introductory address will be delivered by Mr. W. Sampson Handley, M.S., after which the prizes will be distributed by Sir Squire Bancroft. The annual dinner will be held at 7 p.m. on the same evening at the Trocadero, when Sir James Kingston Fowler, K.C.V.O., will preside.

Westminster Hospital.—The annual dinner will be held on Thursday, October 2nd, at the Imperial Restaurant, Regent Street, W.

London School of Medicine for Women.—Surgeon-General Sir Charles Pardey Lukis, K.C.S.I., will deliver the inaugural address on October 1st, at four o'clock.

University of Birmingham.—The winter session will commence on Tuesday, October 7th, when a reception will be held in the Medical Faculty Buildings, and a lecture delivered by Professor Arthur Keith, LL.D., F.R.S., on "The Present Problems Relating to the Antiquity of Man." A reception will be held at 7.30 p.m., half an hour before the lecture.

An Unqualified Practitioner Fined.

Horatio Franklyn Sparling, optician, of 30 Northcote Road, West Croydon, was summoned at Croydon Police Court on Monday last for unlawfully and falsely using the title of "doctor," thereby implying that he was a registered medical practitioner. He pleaded guilty.

Mr. W. E. Hempson, who prosecuted for the Medical Defence Union, said that the defendant's house in every respect bore the signs commonly associated with the residences of medical men. There was the usual red lamp with the word "Surgery" on two sides of it. The same word was upon the window with the hours of attendance. Beside the door there was a brass plate with the inscription "Dr. H. F. Sparling," but the "Dr." was erased after an inquest held upon a baby recently treated by the defendant. The evidence at that inquiry, when the defendant made certain admissions, was the basis of the present case. The father of the child thought he was dealing with a properly qualified medical man, and obtained a prescription from the defendant. The child died, but there was not the slightest imputation that the medicine prescribed was improper for such a case or contributed to its death. The defendant had had a warning, for in the case of another infant he treated the father was so incensed at what he regarded as the defendant's deception that he placed an abusive notice in his window. Yet he continued exactly as before, and he (the solicitor) submitted that it was a case of absolutely brazen impudence, a degradation to the profession, and a danger to the public.

Mr. Wilberforce Jackson, on behalf of the defendant, said that the defendant had had experience as a dispenser. For some time he acted as a dispenser and general assistant to a doctor in New Zealand. He returned with a knowledge of drugs and simple anatomy. He was anxious to qualify but had not the means. He entered into a sort of partnership with a qualified man—verbal, without a deed. The defendant was quite under the impression that he could call himself a doctor if he did not use the words "physician" or "surgeon." His "partner" did not tell him he had no right to do that. The defendant had refused all serious cases that came his way.

The defendant was fined five guineas, with £4 14s. 6d. costs.

Artificial Sunlight for Cripples.

Sun treatment has proved so beneficial to the little sufferers from tuberculous bone and joint disease at the Cripples' Hospital at Alton, Hampshire, that an apparatus for making artificial sunlight is to be obtained. Mrs. Lindsay Johnston has presented a sum of money for the apparatus, and Sir William Treloar and Dr. Gauvain, the Medical Superintendent, will shortly visit Germany to study the latest developments of the ultra-violet rays treatment.

Throat Hospital Jubilee.

Mr. A. W. Mackenzie, a trustee of the Throat Hospital, Golden Square, and the only survivor of those who, fifty years ago, assisted his brother, Sir Morell Mackenzie, in founding it, has issued an appeal for subscriptions to the jubilee fund of £12,000. As necessity and opportunity have arisen the hospital has been rebuilt and extended, and lately the property of No. 33 Golden Square, was bought. The fund is needed to pay the debt on this latest addition. Subscriptions and donations can be sent to the Treasurer, Mr. G. H. Pember, or paid into the Jubilee Fund account at Sir Samuel Scott and Co. (Parr's Bank), Cavendish Square.

Cremation in the United Kingdom.

It is reported that last year's cremations in the United Kingdom numbered 1,064—the largest number recorded since cremation was first practised in this country in 1885. Of these 15 were at Woking, 149 in Manchester, 44 in Glasgow, 52 in Liverpool, 27 at Hull, 15 at Darlington, 14 at Leicester, 521 at Golders Green, 40 in Birmingham, 24 at Leeds, 32 at Ilford, 12 at Sheffield, and 9 at Bradford. Since 1885 the total number of cremations has been 11,047—namely, at Woking, 3,565; Golders Green, 3,480; Manchester, 1,733; Liverpool, 603; Glasgow, 435; Birmingham, 270; Hull, 254; Ilford, 107; Leeds, 143; Leicester, 131; Sheffield, 91; Bradford, 82; and Darlington, 87. The first crematorium in England was opened in 1885 at Woking, when three bodies were cremated. Several large cities afterwards at intervals established crematoria, and the Golders Green Crematorium was opened in 1902. The City of London Crematorium at Ilford was established in 1905.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

NOTICE TO HOSPITAL SECRETARIES AND COLLEGE DEANS.

THE Editor wishes to thank the above gentlemen attached to the various Schools and Hospitals for supplying him with the information from which the foregoing pages have been composed.

NOTICE TO OUR READERS.

As this number is mainly devoted to information necesary for students intending to join one or other of the verious medical colleges and for those who, having passed their curriculum, are about to enter the ranks of the profession, much of the ordinary matter which usually fills our columns is necessarily deferred till next week.

GRATUITOUS COPIES.

A VERY large number of copies of this issue are being sent gratuitously to all the educational establishments, hospitals, reading-rooms, clubs, and large hotels in the United Kingdom, and to a large number in America, India, the Colonies, and on the Continent; should any of our readers desire to present a copy to a patient or friend who contemplates sending his son to a medical school, our publisher will be happy to supply him with a duplicate free of cost on receipt of address.

Dr. P. T. (London, W.).—Thallium acetate may be used with safety for the removal of downy hairs upon the lips, which are unsuitable for electrolysis. Sabouraud gives the following formula:— R Thallium acetate 0.30 gram, zinc oxide, 2 grm., vaseline 20 grm., lanolin 5 grm., rose-water, 5 grm. The action of this salve is slow and progressive.

THE M.D. BRUSSELS.

THERE are three examinations for the M.D. degree of the University of Brussels which must be passed in due order, the whole time taking about ten or tweleve days. The examinations aro conducted in French for the most part, and the fees amount to £22. Many British medical men are holders of this degree. All information may be obtained from Dr. Arthur Haydon, Hon. Sec. of the Brussels Medical Graduates' Association, 23, Henrietta Street, Cavendish Square, W.

Mr. T. Smith (Peckham).—Our correspondent would probably win his case if he can prove that the trap was defective when he took over the premises. The old-fashioned hopper closet pan is now rapidly being displaced by the modern flush-out type.

F.R.C.S.Ed. (Glasgow).—The population of Australia numbers about 6,000,000, according to the most recent returns; that of New South Wales is slightly in excess of Victoria, these being the two predominant states. Queensland, South Australia, West Australia and Tasmania follow in the order given.

THE ROYAL SANITARY INSTITUTE.

AT the Royal Sanitary Institute, the Fifty-sixth Course of Lectures and Demonstrations for Sanitary Officers will commence on September 15th. A Course of Lectures on School Hygiene, for women health visitors and school nurses, will commence on October 6th; a Course of Practical Training for Meat Inspectors will commence on September 26th; a Short Course of Training Lectures on Tuberculosis, suitable to the requirements of women sanitary inspectors and health visitors, and to those whose duties include the visiting of phthisis cases, to be delivered by Dr. J. E. Squire, C.B., at 6 p.m. on Wednesdays during October.

Appointments.

Clarke, Isaac, L.R.C.P. and S.Irel., Medical Officer of Health to the Frocingham Urban District Council.

Finch, G., M.R.C.S., L.R.C.P.Lond., Assistant County Medical Officer of Health for East Suffolk.

Finlay, Douglas Edward, M.B., B.S.Lond., M.R.C.S.Eng., L.R.C.P.Lond. Physician to the Gloucestershire Royal Infirmary and Eye Institution.

Great-Rex, J. B., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Kidsgrove District of the County of Stafford.

Gyllencreutz, James Randolph, M.R.C.S., L.R.C.P.Lond., Senior Assistant Medical Officer at St. John's Hill Infirmary, Wandsworth.

Heffernan, John Thomas, L.R.C.P. and S.Irel., Medical Officer to the Carney, Sligo, District.

Herbert, Noel M. G., L.R.C.P. and S.Irel., L.M.Rot., Assistant Medical Officer to Whittingham Asylum, Preston, Lancashire.

Nimbkar, V. D., L.R.C.S. and P.Edin., L.F.P.S.Glasg., House Surgeon to the Stroud General Hospital, Gloucestershire.

Nutt, W. H., M.D., Ch.B.Edin., Honorary Radiographer to the Chesterfield and North Derbyshire Hospital.

Vacancies.

Canterbury Mental Hospital, Canterbury.—Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Royal Sea Bathing Hospital for Surgical Tuberculosis, Margate. —Resident Surgeon. Salary £120 per annum, with board, residence and laundry. Applications to the Secretary, R.S.B.H. Offices, 13 Charing Cross, London, S.W.

The Queen's Hospital for Children, Hackney Road, Bethnal Green, E.—Medical Officer. Salary £100 per annum. Applications to T. Glenton-Kerr, Secretary.

Carlisle Non-Provident Dispensary.—Resident Medical Officer. Salary £200 per annum, with apartments (not board). Applications to the Hon. Secretary, Mr. G. A. Lightfoot, 23 Castle Street, Carlisle.

St. Mary's Hospital for Women and Children, Plaistow, London, E.—Senior Resident Medical Officer. Salary £100 per annum, with residence, board, and laundry. Applications to the Secretary.

Alnwick Infirmary.—House Surgeon. Salary £140 per annum, with plain board and furnished apartments. Applications to Harold J. Hardy, 32 Bondgate Without, Alnwick.

The Queen's Hospital for Children, Hackney Road, Bethnal Green, E. Resident Medical Officer. Salary £125 per annum, with board, residence, and laundry. Applications to T. Glenton-Kerr, Secretary.

Royal Hospital for Diseases of the Chest, Prevention of Consumption Department, City Road, E.C.—Medical Officer. Salary £250 per annum. Applications to the Secretary.

Oxford County Asylum, Littlemore, near Oxford.—Assistant Medical Officer. Salary £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Ballindalloch (Banffshire), Barmouth (Merionethshire), Raphoe (Co. Donegal).

Births.

Foster.—On August 31st, at Sussex House, Tilehouse Street, Hitchin, the wife of Arthur H. Foster, M.R.C.S., L.R.C.P., a son.

Hunt.—On August 31st, at Secunderabad, Deccan, India, the wife of Edmund Henderson Hunt, F.R.C.S., a daughter.

Moilliet.—On August 1st, at Aire Libre, Puebla, Mexico, the wife of Alexander Keir Moillet, M.D., a son.

Marriages.

Bailey—Guard.—On September 2nd, at St. Paul's Church, Wooburn, Bucks., George Frederick Selborne Bailey, M.D., of Clayton's, Bourne End, Bucks., son of Mr. and Mrs. G. F. Bailey late of Towalla, Watford, to Mabel Yardley, eldest daughter of Mr. and Mrs. Henry Guard, Harrage, Romsey.

Bankart—Moss-Blundell.—On August 30th, at the Chapel Royal, Savoy, Arthur S. Blundell Bankart, M.C., F.R.C.S., to Beryl Winifred, daughter of A. S. Moss-Blundell, of Winchester.

Early—Banks.—On September 3rd, at the Wesleyan Church, Tottenham, London, Philip Vanner Early M.B., B.S. third son of Mr. and Mrs. James Vanner Early, of Witney, to Margaret Winnifred, elder daughter of Rev. and Mrs. T. Hardy Banks, of Tottenham.

Gaff—Needham.—On September 4th, at St. Margaret's, Westminster, Dr. James Gaff, of Hammersmith, only son of Dr. James D. Gaff, of Ewell, to Nellie, only daughter of Richard Needham, J.P., of Stalybridge.

Lock—Smith.—On September 2nd, 1913, at St. Mary's Church, Wymondham, Norman Francis Lock, M.A., M.B.Cantab., F.R.C.S.Eng., of Boston, Lincs, third son of the Rev. and Mrs. John B. Lock, of Herschel House, Cambridge, to Harriet Mary, eldest daughter of Mr. and Mrs. Wm. Partridge Smith, of Wymondham.

MacDonald—Robinson.—On September 3rd, at the Parish Church, Burgess Hill, Sussex, Peter Hay MacDonald, M.B., Ch.B., younger son of Mr. and Mrs. MacDonald, of Leith, to Ada Theodora, eldest daughter of Mr. and Mrs. Robinson, of Burgess Hill, and late of Upper Tulse Hill, London.

Sandison—Gold.—On September 4th, at South Croydon Congregational Church, Alexander Sandison, M.B., B.C., B.A., B.Sc., to Esther Catherine, eldest daughter of Mr. R. W. Gold, Controlling Officer of H.M. Customs, of Llanberis, Spencer Road, South Croydon.

Saner—Dunster.—On September 4th, at the Parish Church, Hanwell, Middlesex, Francis Donaldson Saner, M.D., youngest son of the late John Saner, Esq., of Hull, to Marjorie, daughter of John Dunster, of Golden Manor, Hanwell.

Stoddart—Norman.—On September 2nd, at St. John's, Angell Town, Brixton, assisted by the Rev. F. Lock, George Stoddart, of 11 Ashbourne Avenue, Golder's Green, to Beatrice Eleanor, eldest daughter of Frederick Norman, J.P., F.R.C.S., of Wiltshire House, Wiltshire Road, Brixton.

Watts—Holloway.—On September 2nd, at the Church of St. Mary the Virgin, Chipping Norton, Oxfordshire, John Ernest Price Watts, F.R.C.S., L.R.C.P., son of H. Ernest Watts, L.R.C.P.Lond., L.R.C.S.I., L.S.A., of Sunnyside House, Belmont Road, Ilford, to Elves Lilian Norfolk Holloway, elder daughter of William T. Holloway, of Fern Villa, Chipping Norton.

Deaths.

Alden.—On the 29th ult., at the Acland Home, Ebenezer Wenham Alden, M.R.C.S., L.S.A., of 37 Beaumont Street, Oxford, aged 63.

Ozanne.—On the 3rd inst., at Sheen House, Harrogate, Fanny Lydia, the beloved wife of Fred. N. Ozanne, L.R.C.P.Lond., M.R.C.S.Eng.

Tayloe.—On September 7th, at 10 Cedars Road, Clapham, Mary, eldest daughter of Edward Tayloe, M.R.C.S., aged 63.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, SEPTEMBER 17, 1913. NO. 12.

NOTES AND COMMENTS.

Syphilis and Salvarsan: Historic Discussion.

ONE of the most interesting discussions at the International Congress of Medicine was that which dealt with the treatment of syphilis by salvarsan. It was opened in person by Ehrlich, the discoverer of the great remedy in question. One interesting point brought out by him was the harmlessness of the drug upon internal organs. Guinea-pigs were not killed by daily doses of from 0.02 to 0.05 gram continued for three months. Its non-toxicity in small, long-continued doses was at the same time thus demonstrated. The febrile reaction following injection, concerning which a good deal was formerly heard, he ascribed to (1) errors in the *technique* of administration, (2) to the toxins generated by the destruction of the spirochætes. He further remarked in this connection that salvarsan killed a great number of organisms besides those of syphilis. Recurrence he believed to be the result of insufficient dosage. As regards mortality, he very aptly remarked that chloroform was annually responsible for a much higher percentage of deaths than salvarsan, and he was confident that the proportion might be materially reduced in the latter case by a careful exclusion of renal inadequacy, Addison's disease, status lymphaticus, and other conditions that contra-indicated the use of "606."

Neisser, Wassermann, and Other Authorities.

PROFESSOR NEISSER, who was unable to attend the Congress through illness, sent a communication in which he expressed his belief that salvarsan had a specific action upon the *Spirochæta pallida*, while he denied a neurotropic influence. The specific bactericidal action, in his opinion, was enhanced by the simultaneous injection of grey oil. He went so far as to advocate two complete courses of salvarsan and mercury even in primary cases. One important paper was by Lieut.-Col. Gibbon and Major Harrison. They gave the results of their routine administration of "606" at the Military Hospital, Rochester Row, London. With mercury alone there were 83 per cent. of relapses, as against only 5.1 per cent. since salvarsan had been introduced. The annual saving to the State effected by this new departure they estimated at 70,000 to 80,000 hospital days, an economy equivalent to the cost of keeping a battalion of infantry in hospital for three months. Professor Wassermann made a point of first-class importance by insisting that the cerebro-spinal fluid of every syphilitic should be examined at least once during the first year after infection for the Wassermann reaction. If positive, prolonged and energetic treatment with "606" and mercury were indicated. He maintained that when once syphilis produced clinical symptoms of cerebro-spinal involvment, it could not be eradicated from the system.

An Ancient and Formidable Disease.

DR. H. MACCORMAC gave an account of 500 cases treated at the Seamen's Hospital without a single death. He was of opinion that the occasional severe reactions which followed a second injection were manifestations of the anaphylactic state. (If such were the case, however, one would rather expect fatal results from a second injection.) Possibly, however, the anaphylaxis might be due not to the salvarsan directly, but to secondary anaphylactic substances resulting from its injection. Several other authorities attributed recurrence to inadequate use of the drug. Dr. J. E. R. McDonagh spoke of "spasmodic" injections of salvarsan that were worse than useless. He also alluded to his own important work in the demonstration of the spore-like bodies present in syphilis (later described by Ross and Noguchi). He claimed that "606" had no effect on these bodies, but affected only the gametic elements (spirilla). Other interesting and valuable suggestions and observations were offered. Amongst them was one by Dr. Schreiber (Madgeburg), who pointed out that prostitutes were voluntarily offering themselves for treatment. Dr. Ullmann (Vienna) dwelt on the fact that an anti-salvarsan paper was offered to the Congress. This discussion is likely to be of historic value as regards the ancient and formidable disease with which it dealt.

French Sanitation.

THE paragraph published in these columns lately upon sanitation—or, rather, insanitation—in France, evoked some interesting correspondence. There seems to be a pretty general consensus of opinion as to the defectiveness of drainage systems both inside and outside the dwelling. Closets of an old, bad type are the rule rather than the exception. In hotels—even those that are large and expensive—the closets are of bad type, ill-ventilated, often out of repair, and totally inadequate for the number of persons in the building. A correspondent says that in one hotel there was a single closet to each floor, which contained some fifty bedrooms. Every morning there was a long queue of visitors of both sexes patiently awaiting their turn. The hotel was without baths. From a frankly financial point of view, it would be a good thing were the French to set their hotels in sanitary order forthwith. Even in Paris itself, it is only in the largest and finest *caravanserais* that really efficient modern sanitation is to be found.

Public Memorial to a Medical Practitioner.

THE establishment of a public memorial to a medical practitioner is an event of some significance. For some forty years the late Dr. William Rutherford practised quietly, modestly, and honestly in the town of Ballinasloe. He cared little for fame, and less for money. "His sole idea," said his friend, Dr. Mills, at the unveiling of the memorial a few days ago, "was to apply such abilities as God had given him in ungrudging measure to the alleviation of the sufferings of those seeking his aid." For forty years he did his duty honestly and intelligently to all who came to him, whether he was to receive any preliminary reward for his services or not. He recreated himself in public matters for the good of the town where he lived. When he died two years ago those who knew him, those among whom he had spent his life, his fellow-citizens and neighbours, felt that it was necessary to express in some tangible form their appreciation of a noble and simple life. The drinking-fountain unveiled recently will teach to future generations the honour that is due to "a sincere friend, an eminent physician, a public sprited and upright citizen." Rutherford's medical brethren feel proud of the respect shown to the memory of a colleague whom they too loved and honoured.

LEADING ARTICLES.

FLIES AND INFIRMARIES.

THE value of progressive science to the man in the street clearly depends on the thoroughness or otherwise with which it is reduced to practice. In the United Kingdom it has hitherto proved a sound asset because of the way in which sanitation is expressed in terms of drains, ventilators, disinfection, isolation and the whole wide range of weapons placed by the legislature in the hands of the medical officer of health. Of late years that most indispensable official has had piled upon him duties of a multifarious and oftentimes exacting nature. Indeed, it is hardly too much to say that almost every great advance in medical science is tolerably certain to add to his responsibilities. In many large centres of population it has been found necessary to revise the conditions of the public health department by applying the principle of division of labour, so that the chief officer has the assistance of a bacteriologist, an analyst, a school medical officer, a tuberculosis officer, and so on. It almost looks as if in the near future a subordinate branch of officials would be required for the special purpose of exterminating flies, which modern science has shown to play an important part in the spread of infection. A vigorous campaign against these insects has been carried on in America for some years past, and less actively in the United Kingdom. There is no need to review the evidence which proves that flies are capable of conveying the germs of cholera, enteric fever, erysipelas, in short, of an interminable series of micro-organisms directly and indirectly pathogenic to man. Of all places, then, the wards of a hospital should be carefully protected from flies by such obvious means as screening, the use of insecticides, but above all by the careful and systematic removal of stable and other garbage from the immediate vicinity. It must be confessed that so far few hospitals have recognised the necessity for such a campaign, and even the best appointed modern institutions permit flies to enter and range the building from cellar to attic—including kitchen—without let or hindrance. The whole issue has been publicly raised by a dispute that is now going on between two London boroughs. It seems that at a meeting of the Southwark Board of Guardians a week or so ago, it was stated by Dr. Bruce, the medical superintendent, that there were 28 cases of enteritis in children, and that six deaths had already taken place. He gave it as his firm conviction that the outbreak was due to poisoning from refuse-filled trucks of the Camberwell Borough Council on an adjoining railway siding. One of the guardians observed there were "millions" of flies in the infirmary, and gave a graphic picture of the way in which patients were tormented by them. The imputation as to the deaths has been stoutly denied by the Camberwell Council, and there the matter stands for the present. It seems to be admitted, however, that within some fifty yards of the infirmary a number of railway trucks stand, and that these are habitually filled with filthy refuse. Anyone versed in the knowledge of modern hygiene would at once ascribe the enteritis in the infirmary to the refuse in the trucks, with infection being carried to the patients' food by the agency of flies. Direct proof of the transmission it would be difficult or impossible to obtain. Under the circumstances it is clearly the duty of the Camberwell Council to put an end to a public danger without a moment's loss of time. Flies or no flies, infirmary or no infirmary, enteritis or no enteritis, the retention of filth in open trucks in the centre of a densely crowded district is intolerable. It has been urged that the trucks have been so used and so placed for the last 35 years. In the light of modern sanitary progress it is deplorable to think of the disease and death that must have resulted therefrom. A few months ago it was our duty to criticise the Southwark Council for their antivaccinationist leanings, but in their present fight for the wholesomeness of their infirmary we wish them speedy and complete success. The local authority, it is said, has made various complaints to the Local Government Board. It will be interesting to watch the action of that official body. Will the protests of Southwark be lost in the pigeon-holes of a circumlocution office, or shall we have a strong commonsense handling of a public nuisance and danger? At any rate, the Local Government Board has so far shown no great activity in the affair, for we understand an inspector was sent to view the dust heaps on the 25th of August. Surely four weeks should have afforded sufficient time for arriving at a decision. Possibly the 28 cases of enteritis and the six resulting deaths may induce the Local Government Board to take a somewhat less leisurely view of their responsibilities in the matter.

FOOD POISONING.

Every medical practitioner is familiar with the outbreaks of illness that occur from time to time, usually in the warmer months of the year, soon after partaking of food. Sometimes patients are attacked with startling suddenness—perhaps on returning home after a public dinner—and not infrequently the illness is of great severity, or even fatal. Cases of "ptomaine poisoning," as they are generally called, may lead to litigation, though it is by no means an easy matter to prove that restaurant keepers or provision merchants are to blame in respect of the quality of the food or the methods of its preparation. A comprehensive report on bacterial food poisoning and food infections, by Dr. W. G. Savage, has just been presented to the Local Government Board (New Series, No. 77), containing an excellent summary of our present knowledge of the subject. It is now generally recognised that illness of this nature is really due to bacterial contamination of food by certain pathogenic organisms, which enter the system either living or, after being killed by cooking, exert a baneful influence by reason of their toxins. In the present report 79 outbreaks in Great Britain and Ireland are analysed, in addition to many more from Continental sources. Various special kinds of food poisoning are dealt with in one section, such as that from mussels, cheese, potato, and ice-cream. The incubation period may be said to average from six to twelve hours, and the three symptoms of vomiting, diarrhœa and abdominal pain are met with in practically every outbreak and in the great majority of cases. The case-mortality rate for the British outbreaks, as far as the figures are available, works out as 2.16 per cent. In nearly all these outbreaks the incriminated meat was derived from pigs or cattle, while in the Continental cases the horse was also concerned. It is noteworthy that the sheep is almost completely absent from the list, only one instance being recorded. Meat pies and tinned or made-up meat seem to have been responsible for the greatest number of cases. The Gaertner group of bacilli were isolated or shown to be the cause in 71 per cent. of the investigated outbreaks, while other organisms met with were the *Bacillus coli*, the B. *botulinus*, and *B. proteus*. It is not yet definitely settled whether the effects of putrefaction, using the term in its widest sense, are sufficient to cause disease apart from the products of any single bacillus. Experimental research appears to show that the ordinary methods of heating may be insufficient to destroy the toxins of the Gaertner group of bacilli in the case of tinned meats. Though the same micro-organisms are held to be responsible for the majority of cases of food infection, it is difficult to trace the means by which they obtain access to food. The hypotheses that the bacilli are of human origin, introduced by human carriers, or from the fæcal infection of food, or that the germs are derived from animals themselves suffering from diseases due to the Gaertner group, are each worthy of consideration; but Dr. Savage is of the opinion that the last view is the one which explains all or most of the phenomena due to food poisoning. The preventive measures against these outbreaks consist briefly in a more rigid inspection of meat at the time of slaughter, greater cleanliness in premises where made-up food is prepared, and a greater official cognisance of food-poisoning epidemics.

CURRENT TOPICS.

Sanitation in Panama.

It cannot be denied that one of the greatest triumphs of modern preventive medicine has been the reclamation of malaria-infested territory for human habitation and commerce. Indeed, it is hardly too much to say that, had it not been for medical science, the Panama Canal could hardly have been constructed at all. The June report of the Department of Sanitation of the Isthmian Canal Commission is of peculiar interest to all engaged in fighting malaria. The fact that the malaria sick-rate for the month in the Canal zone was only .40 per cent., as compared with 8 per cent. in 1906, gives point to the statement that "no anti-malaria work . . . . at the relocation camps other than daily destruction of *Anopheles* in houses has been accomplished this year. In previous years, when such auxiliary work was not accomplished, the malaria sick-rate was relatively higher, even though efforts were then made to destroy mosquito larvæ in near-by ponds, streams, etc. For the six months ended June 30th, 1912, 255 cases of malaria were reported from the 'relocation,' while during the corresponding period of 1913, when all work but destroying mosquitoes in houses was omitted, only three cases were reported. This particular phase of anti-malaria work is thought to be of considerable importance, and is being applied at all villages where *Anopheles* are noted." It is somewhat disquieting to learn that new breeding grounds, difficult to deal with, are being created at the Pacific entrance by the hydraulic flooding of large areas. A new danger is foreshadowed by the discovery of *Anopheles tarsimaculata*, a prolific source of malaria transmission, on the Pacific slope, whither it has been carried in goods brought from Colon. It is not understood why this species, in spite of apparently favourable circumstances, has not become as numerous at the Pacific as at the Atlantic terminal. There is no reason to suppose, however, that any diminution in the work of mosquito destruction will be countenanced by the health authorities.

Cocaine Anæsthesia, and Unregistered Practitioners.

The fear of "taking gas" for dental extraction has rendered the use of local injections with cocaine extremely popular with the general public. Unfortunately the man in the street is still unable to discern the registered from the unregistered dental practitioners, and he generally ends by going to the man who advertises most. It has been estimated that about 200,000 injections of anæsthetics are made every day by unqualified men. If this be the case, the risks attendant upon the practice cannot be too widely known. In the interim report of the Committee of the British Association appointed to inquire into deaths by, or during, anæsthesia presented at the Birmingham meeting last week, attention was drawn to three fatalities which had occurred during the past few months among members of the working classes to whom cocaine, or one of its derivatives had been administered for tooth extraction by unregistered dentists. Apart from the numerous cases of poisoning which result from this alkaloid, there is the grave risk of septic infection owing to the introduction of pyogenic organisms through deficient sterilisation of the injecting appliances. Further, there is the laceration and reduction of vitality of the inflamed tissues into which the analgesic solution may have been forced, resulting in sloughing or necrosis. The present report is a strong plea for the endorsement and strengthening of the resolution passed two years ago at Sheffield representing to the Home Office and to the Privy Council the urgent need of legislation to protect the public against unnecessary risks incurred through the administration of anæsthetics by unqualified persons. Sir Frederic Hewitt emphasised last week the strong necessity that further steps should be taken by the Legislature to put an end to the present unsatisfactory conditions.

The Analytic Idea.

ONE way of making caviare acceptable to the general is to express the magnificent in terms of the commonplace. If there is no wonder for us in the sea, no beauty in the earth, we are helped to amaze by being told that they are composed respectively of "little drops of water, little grains of sand." "What a piece of work is a man!" and he has been reduced to his essentials. A German, needless to say, has worked it out. A 150-pound human being is worth £1 11s. 3d. That is in terms of his constituent elements. "His fat is worth 10s. 5d.; of the iron there is hardly enough to make a nail an inch long. There is sufficient lime to whitewash a pretty good-sized chicken house. The phosphorus would be sufficient to put heads on 2,200 matches, and there is enough magnesium to make a pretty firework. The average human body contains enough albumin for 100 eggs. There are possibly a teaspoonful of sugar and a pinch of salt." At first sight we seem to have found a useful outlet for our surplus population. To turn the unemployable into whitewash and get the unemployed to apply it to our chicken houses sounds simple, but it is not. For the elements are so mixed in us that, when Nature sets them up and says this is a man, it would cost more than our £1 11s. 3d. to turn our substance to any baser uses. It is bad luck that when we have done with our bodies we cannot hand them over to the hardware dealer, but it is our fate. Dust we are, and we remain the quintessence of dust.

Making Plain the Crooked Path.

"SYPHILIS is at once the lightest and the most terrible of diseases, which causes more misery in our civilisation than that of any other." So says "Civis," in this month's *English Review*. "Civis" has written an article in a widely read magazine that should do a great deal of good. He has told the truth about syphilis, and has pointed out that, though terrible if neglected, the disease is one of those that are most amenable to treatment. "Civis" says what he has to say clearly and fearlessly. There is nothing new or startling in the article—indeed, the average doctor may find it rather dull, as it tells him nothing he did not know before, nor does it bring a single new idea to help to solve the problem of venereal disease. Its value is extrinsic. It is written to be understanded of the people, and it is published where the people can get hold of it. That is what we want. We know enough about venereal disease to tackle it successfully if we get the chance. Hitherto we have not had the chance. It is articles such as this that are our opportunity. Syphilitic ignorance is bliss till secondary symptoms occur. Simple knowledge of the disease spread far and wide through the laity will bring them to us. The people know us well enough to be sure that we are not raising a scare for our own pecuniary advancement; and, when they have had it dinned into them often enough that syphilis wants treatment, and that treatment cures syphilis, they will come to us for the help that we can give. The publication of such information can do nothing but good. and it can do the greatest good. We are ready and waiting to get rid of syphilis, as we have got rid of other diseases; we have the means, the power, and the will, and let us hope that we will soon have the opportunity.

The Merry Heart.

THE beneficial effect of keeping up the spirits of a patient who is wont to become depressed is well known. In fact, "to exhilarate the heart," says Burton, "has been the practice of every age and country as the best means of preserving life." Regarded as a psychological state, laughter has been thought to be merely the expression of the overflow of nervous energy, but this shows itself in many other ways than in visible mirth. According to Dr. W. McDougall, of Oxford, who read a thoughtful paper upon the subject last week at a meeting of the Subsection of Psychology of the British Association at Birmingham, laughter is Nature's protection against the depressing effect upon the system of our sympathetic tendencies. It may seem very illtimed, but most of us manifest a desire to laugh when we see a person fall down, for instance. Our kindlier feelings, however, soon prevail and, controlling our risorial muscles as best we can, we hurry to the spot to render assistance. Probably, if we did not give vent to our first impulse, the "useless minor sympathetic pains," referred to by Dr. McDougall, would become too much for us, and the length of our faces would daily increase. Medical men ought, therefore, to be the cheeriest of all people and the most readily moved to laughter. But it is because of the changed direction of mental outlook induced by cheerfulness and mirth which interact powerfully even upon physical conditions that a "merry heart doeth good like medicine." The old saying of Marsilius Ficinus—"for without mirth physic is of no force"—may be heartily commended to the notice of all medical practitioners as well as psychologists.

Rags and Bones.

HALF the world does not know how the other half lives. A good deal of unexplored territory still remains to be gone over by the would-be sensational journalist or by the ardent philanthropist. We really know very little about the thriving industry known as the "rag and bone" trade, the very life of which, it is reported, is in danger of extinction, if certain new regulations put forward by the London County Council are approved by the Local Government Board. Though the handling and storing of old rags can hardly be regarded as a choice occupation, yet the dealers in this business do not appear to suffer in health to a greater extent than, say, scavengers or fell-mongers. It is true that, in the interests of public health, more attention seems to have been paid to the alleged injuries to health inflicted by the mere proximity of premises where "offensive trades" are carried on, than to the effect upon the workers therein. Infection may, of course, be conveyed by old clothes and rags, but these do not become more offensive or unwholesame from decomposition as would fat, bones, and skins. It should not be impossible to provide for the adequate sterilisation of old rags without injuring the trade of the marine store dealers. The lot of the small hawker who enlivens the suburban street with his raucous cries of "Any rags?" or "Old Clo'!" is less enviable, because the collection of animal matter, even in the ossified state, is at present an undoubted infringement of sanitary laws, so that his "speciality" will, in all probability, need a good deal of reorganisation. No doubt the large soap-makers, bone-boilers, and manufacturers of artificial manure and glue will have something to say if any shortage of raw material should be threatened by any modification of the work of the London rag and bone men.

Green Vegetables in the Treatment of Diarrhœa.

The value of the cooked stems and leaves of certain vegetables in the diet is indisputable. Their anti-scorbutic and gently laxative properties render them useful food adjuncts, but it sould be remembered that their actual food value is relatively low. A novel use for greens is described by Dr. Cunningham Wilson, of Birmingham, Ala. *(a)*, who has been treating for all chronic diarrhœas and cases of acute diarrhœa and dysentery that have resisted ordinary methods, with a diet of spinach, turnip greens and mustard tops, with the most gratifying results. The method has been adopted by the author for the last nine years, and it is stated to be so simple and to give such a measure of relief that patients are willing to continue the treatment as directed. A tablespoonful or more of spinach, turnip or mustard tops is given four times a day for one to two weeks, no other food, save a little dry toast, being allowed unless patients become very anxious for it. At first the stools show the undigested food, but immediately following this the motions become more solid, and at the same time flatulence and tenesmus disappear when these symptoms have been present. The author's first experience of this treatment was confined to chronic conditions, but later he found that equally good results could be obtained in acute dysenteries which failed to respond to salts or opium and oil. The spinach is thoroughly well cooked, and is generally well tolerated. The use of the greens is advised for some few weeks after the patient has got on to regular diet. The method certainly appears simple, and should be accorded a wider trial.

PERSONAL.

Dr. William Arnott Dickson, M.D., Ch.B.St. And., F.R.C.S.Edin., D.P.H., has been appointed Tuberculosis Officer for Gloucestershire.

Dr. Hideco Noguchi, of the Rockefeller Institute for Medical Research, New York, is reported to have discovered and cultivated the specific organism of rabies.

Sir James Crichton-Browne delivered the thirteenth Presidential Address last week at the Annual Conference of the Sanitary Inspectors' Association at Llandudno.

Dr. Trevor Berwyn Davies, M.D., B.S.Lond., B.Sc., M.R.C.P.Lond., has been appointed Registrar and Pathologist to the Hospital for Women, Soho Square, London.

Dr. E. Burnet, formerly Medical Officer of Health for Leamington, has been selected as prospective Liberal candidate for the united boroughs of Warwick and Leamington.

Dr. Francis Warner, whose retirement from the post of Senior Physician to the London Hospital was announced a few weeks ago, has been elected Consulting Physician to the Hospital.

A drinking fountain was unveiled the other day at Ballinasloe as a public memorial to the late Dr. Rutherford, who practised in that town for nearly forty years prior to his death in 1911.

Dr. A. R. Urquhart, Physician Superintendent of the Murray's Asylum, Perth, has recently intimated his resignation to the directors for health reasons. He was appointed to the position in 1879.

Dr. John Dean Buchanan, of Blackburn, has been appointed Medical Officer and School Medical Officer for Lancaster in succession to Dr. Joseph Cates, who has been appointed to similar positions for the county borough of St. Helens.

Dr. J. Walton Browne, LL.D., M.D., late Senior Surgeon to the Royal Victoria Hospital, Belfast, has been appointed a Deputy Lieutenant for the County of that City. We heartily congratulate Dr. Browne upon the honour so deservedly bestowed upon him.

Sir Rickman Godlee will confer the Fellowships of the American College of Surgeons at the first convocation of the Institution, to be held at Chicago on November 13th next. About 1,400 prominent surgeons of the United States and Canada are to be created Fellows.

Dr. John Lewis Thomas, of Harefield, Bitterne, Hampshire, formerly Senior House Surgeon at the Nottingham General Dispensary, and who died on June 10th, aged 66 years, left estate of the gross value of £6,110 2s. 2d., of which £5,978 19s. 8d. is net personalty.

Sir William Macgregor, G.C.M.G., Governor of Queensland, who last week celebrated the twenty-fifth anniversary of his appointment as Colonial Governor, was at one time attached to the medical staff of the Glasgow Royal Infirmary, and also to that of the Royal Lunatic Asylum, Aberdeen.

Dr. Frank Lang, of Sunderland, is retiring, we understand, after having been in practice in that town for the long period of 55 years. Dr. Lang, though he has reached the advanced age of 84, is still brisk and active, and there is a general hope amongst his many friends that he may long enjoy his well-earned rest.

Prof. Jastrow, of the University of Pennsylvania, the well-known Assyriologist, will deliver a lecture upon "Babylonian Medicine" at the Royal Society of Medicine (Historical Section), on Friday, October 10th, at 5 p.m. All members of the profession, as well as students, interested in the subject are invited to attend.

(a) *Boston Medical and Surgical Journal*, August 28th, 1913.

CLINICAL LECTURE

ON

FUNCTIONAL DISORDERS OF THE HEART.

By ROBT. OSWALD MOON, M.D.Oxon., F.R.C.P.Lond.,

Physician to the Hospital for Diseases of the Heart; Assistant Physician, Royal Waterloo Hospital.

IMPORTANT and frequent as are the various structural lesions of the heart whether of the valves or of the muscle itself, perhaps in ordinary clinical work we more often meet with cases which, while presenting morbid affections in the region of the heart, show on examination no structural lesion either of the valves or of the cardiac muscle. In fact, when a patient comes complaining of palpitation of the heart or pain in the region of the heart, there is considerable likelihood of the condition not being connected with any organic lesion at all, but being merely due to some functional derangement of the heart. So I thought it might be profitable for us this afternoon to go over some of the more common functional disturbances of the heart, and we will begin with palpitation.

Palpitation of the heart.—By this is meant a morbid consciousness of the beating of the heart, that is, each beat of the heart awakens in the patient a painful sensation; when severe there is a sense of constriction of the throat, an indefinable feeling of anguish, the heart seems as though it would break through the chest wall, the face becomes pale, is covered with sweat and the extremities are cold. These symptoms may of course occur in connection with, or be indicative of, an organic cardiac lesion, but it is far more common to meet with this symptom by itself where no cardiac lesion is to be detected.

In fact, this condition is so often met with apart from any organic lesion of the heart, that when a patient comes complaining of palpitation, and of palpitation only, the probabilities are considerable that nothing will be found amiss with the heart. As has been well said by Potain, "*Tout malade qui consulte pour des palpitations doit être présumé exempt de maladie du cœur,*" and, a century earlier, Senac had said "*Les palpitations surviennent principalement dans les maladies où il n'y a aucun vice du cœur.*" Sometimes there is a certain periodicity about these attacks of palpitation, and they will occur punctually at the same hour of the day. They may last for a few minutes or an hour or two. Occasionally the attack of "palpitation" is accompanied by "heart fear" (Herzangst), and these two sensations may present many points of resemblance to some forms of angina pectoris.

Causes.—(1) Dyspepsia, and more particularly flatulence, are probably the most common causes of palpitation of the heart, so that the first thing to do when a patient comes complaining of palpitation is to consider the condition of the stomach and intestines. In these cases, if one presses forcibly with the fingers in the fourth left intercostal space of the præcordial region, one finds a point where the pressure evokes a cry from the patient, and this by French writers is thought to be specially significant of the dyspeptic origin of the palpitations.

(2) Tobacco, which may cause palpitations not only to those who smoke, but to those who are engaged in the manufacture of tobacco; the effect of the nicotine is to lower the blood pressure and to render the heart's action rapid and irregular, thus giving rise to palpitations.

(3) *Tea and coffee in excess.*

(4) *Keen emotions*, such as fright or anger; these are most frequent causes of palpitations. A case came before me recently of a woman, aged 21, who had been suffering from palpitation of the heart and a choking sensation off and on for the past year. She had had rheumatic fever at the age of 13, and there were *signs* of mitral regurgitation, but there had been no cardiac *symptoms* till a year ago, when she had had a severe emotional shock.

(5) *Conditions of neurasthenia and cerebral overwork.*

(6) *Hæmorrhage and conditions of anæmia* by lowering the blood pressure accelerate the heart beat, and so give rise to palpitation.

(7) *Early pulmonary tuberculosis.* In the early stages, when there are no physical signs in the lungs, it is important to recognise this as a cause of palpitations; if in such cases the arterial tension is below the normal, then the diagnosis of tuberculosis becomes very probable.

(8) *Excessive consumption of carbo-hydrates* would seem sometimes to cause palpitations. It is necessary to distinguish true palpitations from false; in the latter the thorax presents a condition of hyperæsthesia such that whenever the heart contracts the shock at the apex awakens a painful sensation, even when the beats are not more precipitate or violent than in the normal condition. One must also distinguish true palpitations from the little shocks and tremblings which are sometimes met with in the thoracic walls in the case of nervous and hysterical subjects. One must remember that nervous individuals are conscious of processes which in the healthy do not penetrate the sensory sphere; the threshold of sensation is at a much lower level in a nervous patient.

Prognosis is usually good, unless the palpitations are associated with an organic disease of the heart or with Graves's disease; in most cases they disappear with the removal of the cause, but no doubt obstinate conditions of dyspepsia and neurasthenia or hysteria may resist all our efforts.

TREATMENT.

Rest, physical and mental, is generally indicated. A stay in the country away from the stimulating, over-exciting atmosphere of a large town may be all that is required. On the other hand, complete idleness is seldom beneficial, and a patient recently under my care definitely alleged that he was always better when doing his work; much, of course, depends on the diagnosis which one makes of the psychic condition of the patient. Speaking generally. it is well to insist on regular exercise in moderation, and particularly on regular hours of sleep.

Hydrotherapy is most useful for the more robust patients in the form of the morning cold bath, the cold douche, or warm hydrotherapy in the form of jet douches.

Drugs.—Bromide will always be found useful in those cases connected with a general nervous erethism; sometimes it may be well combined with belladonna. Valerian often gives relief; it is best administered in the form of valerianate of ammonia. In the more asthenic cases quinine and dilute hydrobromic acid are often helpful. When, as is sometimes the case, palpitation is accompanied by high tension, it will be relieved by sod. nitr. gr. 1, with tinct. aconite m. v. t.d.s. Patients often wake up in the middle of the night with troublesome palpitation, which may be avoided by taking a dose at bedtime of the following:—

℞ Pot. Bicarb., gr. xv.
Sp. Ammon. Aromat., ʒss.
Aq. Menth. Pip. ad ℥i.

In certain cases in which the digestive system is unaffected small doses of digitalis may be given for a few days, not for its tonic, but for its sedative action.

Tachycardia.—This differs from palpitation in that it is a purely objective symptom which is perceived by the doctor and is perhaps completely unrecognised by the patient. The causes are very similar to those of palpitation; here, too, emotion plays an important part, as do also tea, coffee, and alcohol; in the latter case the tachycardia seems to be due to a neuritis of the vagus nerve. Often tachycardia is an early indication of tuberculosis or of Graves's disease; in the latter case the rapid, excitable action of the heart may for long be the only evidence of a latent hyperthyroidism. It is also frequent after hæmorrhage because the blood pressure is notably diminished, and the heart beats quicker as it has less difficulty in emptying itself. Perhaps the most common cause for tachycardia is some gastro-intestinal disturbance connected sometimes with enteroptosis, and this when frequently repeated may ultimately cause disease of the myocardium and of the coronary circulation. Closely connected with the tachycardia of gastro-intestinal origin is that curious condition known as "paroxysmal tachycardia," in which, without any warning, the heart seems suddenly to lose all control and to beat with astonishing rapidity, anything from 160 to 300, so that the pulse at the wrist often becomes uncountable. The peculiar feature of this condition is the suddenness of its onset and its equally sudden disappearance; as a rule, the beats are regular and there is no arrhythmia; what is still more peculiar, however, is that the patient is often so comparatively little inconvenienced by what is undoubtedly a somewhat serious condition. The attacks may last for a few hours or a few days, or even for several weeks. In my experience 24 to 36 hours is an average time for one of these attacks; the patient, though feeling uncomfortable and somewhat distressed, will still be able to continue his work. As a rule, there is no organic lesion associated with this paroxysmal tachycardia, but I have myself met with it in a case of aortic disease and also of mitral stenosis, and in one case which came to an autopsy a very large patent foramen ovale was found; however, in all these cases the attacks of paroxysmal tachycardia seemed to be quite independent of, and to have no direct relation to, the organic cardiac lesion.

The immediate causation of the attack is very uncertain; patients themselves will often attribute it to some sudden exertion or condition of indigestion. Of its nervous origin I have recently had an example in the case of a young woman, aged 23, who was an in-patient at the Heart Hospital for some weeks with paroxysmal tachycardia; whenever any mention was made of her going out of the hospital by the house physician or the sister, an attack would immediately start off.

Prognosis as regards life may be regarded as favourable. Some few years ago I saw a member of our profession, aged 70, who had suffered from these attacks for some years without great inconvenience. Generally the attacks become less frequent and less severe with advancing years. At the same time one must realise that the attacks themselves are evidence of the heart not being entirely sound, and when an attack of this kind lasts several days, or even weeks, there is great danger of dilatation of the heart, which may become permanent with all the symptoms of backward pressure supervening—pulmonary congestion, œdema of the feet, etc., with a fatal termination, so that even with regard to life our prognosis must be guarded. The general outlook must be based on the heart's power of reaction to moderate effort in the intervals of the attacks. On the whole, if the heart does not increase in size and the attacks are of short duration, the prognosis is good. We are often asked the question, "Can the condition be cured so that there shall be no recurrence of the attacks?" In the present state of our knowledge a distinct negative must be returned to this question. In many cases the frequency and severity of the attacks may be reduced by treatment wisely conducted, but their permanent arrest is too infrequent to justify us in holding out uncertain hopes. The question often arises whether such patients should be allowed to go on with their work. Unless the attacks are becoming more prolonged, or signs of dilatation have manifested themselves in the interval, it does not seem reasonable to interfere with a patient's means of obtaining a livelihood. Speaking generally, the less frequent the attacks the longer they last. As a rule, the attacks in the case of any given patient are of about the same duration.

Treatment.

During the attack.—Lower the head and elevate the legs. The application of an icebag to the heart nearly always affords some relief. There are patients who find that they can arrest their attacks by taking iced water or strong coffee; I have found the administration of an emetic to be more useful, acting on the suggestion of a patient who found that vomiting always relieved him, but it has a depressing effect and is not to be generally recommended. Some relief may be obtained by making the patient press the elbows into the sides, and at the same time making pressure on the abdomen. Compression of the trunk of the vagus in the neck has been said to be efficient in arresting the attack; if this is not successful, galvanisation of the nerve may be tried. Sometimes by making deep swallowing movements the inhibitory action of the vagus nerve is stimulated, and the attack is arrested. Drugs given during the attack seem to be of very little use; digitalis given in fairly large doses I have not found to have any satisfactory effect upon the rapidity of the cardiac action; occasionally I have had good results from erythrol tetranitrate (gr. ¼, IVtis horis), and it seems worth trying.

In the intervals of the attacks special attention should be paid to the digestive system, as the seizures seem often to arise in connection with some gastro-intestinal disturbance. Alcohol and tobacco should certainly be avoided, and tea only taken in strict moderation. There seems no reason why the patient should not take ordinary exercise or follow his occupation, provided it is not exceptionally arduous. The continual wearing of an abdominal belt in the daytime has been recommended by Dr. Lewis. As regards drugs, it has seemed to me that a combination of bromide of potassium with tincture of hyoscyamus has reduced the frequency of the attacks.

The nervous heart has to be diagnosed mainly by the subjective symptoms; the important objective symptoms are fluctuations in rhythm extending over considerable periods of time and the association of irregularity with unpleasant, indefinable sensations in the cardiac region. But of course great caution must be exercised in making the diagnosis of "nervous heart," especially in those who have passed the fortieth year, for we have to differentiate the following conditions from a nervous heart:—(1) Sclerosis of the coronary arteries; (2) chronic myocarditis; (3) some forms of the alcoholic heart. A further difficulty is that patients with changes in the coronary arteries and the myocardium not infrequently develop nervousness; they begin to worry about the disease and anxiously watch for every heart-beat.

Prognosis.—The disease has no direct influence on the duration of life; on the other hand, complete recovery is infrequent. In the case, however, of coronary sclerosis the patient's life is in danger of being terminated at any moment, while myocarditis carries with it a gloomy outlook.

Treatment is largely that for neurasthenia or hysteria, when one can be sure that the heart is unaffected. In these cases it is important to stop excessive mental and physical labour, and specially that form of excessive physical exertion which is carried on under the guise of athletics.

Pseudo-angina is an unsatisfactory term, as there is no fundamental resemblance to true angina, so that there ought to be little difficulty in diagnosing between them. Sometimes it is termed "angina vaso-motoria," but this is too narrow a definition, because these conditions may not be always due to vasomotor changes. It is far more frequent in women than in men and in comparatively young women. While true angina almost invariably makes its first appearance after some definite exertion, this minor form usually comes on for the first time when the patient is quietly resting. In several cases that have come before me there has been a definite history of some emotional disturbance which seems clearly to have been the starting point of these minor attacks.

The seizure may last for perhaps two or three hours, and, though the pain may be severe, it is never so agonising as in true angina, nor is there the sensation of impending death. Patients may, however, become unconscious for a quite considerable length of time. Usually there is no organic cardiac lesion, and in my experience the patients have seemed in other respects healthy.

The pain in pseudo-angina tends to radiate centripetally rather than centrifugally, as in true angina; thus the attack often begins with tinglings and shooting pains in the upper limbs, which then pass to the præcordial region; it would seem sometimes as though the sympathetic were implicated.

The pain is less fixed and more diffuse than in the true angina; the sensation experienced by the patient is that of fulness, tension or weight in the stomach, the heart feels too big but the sensation of being grasped in a vice is quite exceptional. The attacks often exhibit some periodicity; generally they occur when no effort is being made, or are preceded by slight troubles such as vomiting and nausea. In specially nervous subjects the attack may terminate with a sort of hysterical crisis, such as an outburst of tears or the passage of a large quantity of clear urine. In the case of men this may often be associated with excessive tobacco smoking, and is known as tobacco angina.

Prognosis is entirely favourable; death in an attack has been known to occur, but such cases are very rare. On the other hand, the symptoms may prove very resistant to treatment, and, if the underlying neurosis be not judiciously handled, the patient may drift into a condition of chronic invalidism. This, however, is quite the exception; most cases get entirely well.

Treatment.—As with true angina, so in these cases, when there is clearly arterial spasm during the attack, amyl nitrite is indicated; similarly when there is no such spasm, it may be necessary at times to administer morphia subcutaneously, but this ought to be quite exceptional. If the body is cold it is well to apply heat to the trunk and the extremities, and to administer ammonia or other diffusible stimulants.

It is important to treat constipation and flatulence; almost any kind of digestive disturbance may give rise to this form of angina. It is well to avoid too tight skirtbands. Massage is often useful in these cases, and I have found the artificial Nauheim baths give very good results.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by James Sherren, F.R.C.S., Surgeon to the London Hospital, and to the Poplar Hospital for Accidents. Subject: "The Diagnosis of Chronic Ulcers of the Stomach and Duodenum."*

ORIGINAL PAPERS.

EXPERIMENTAL OBSERVATION ON THE REPAIR OF FRACTURES AND THE INFLUENCE UPON IT OF VARIOUS OPERATIVE PROCEDURES. (a)

By ERNEST W. HEY GROVES, B.Sc.Lond., M.D., F.R.C.S.Eng.,

Lecturer on Surgery, University of Bristol; Assistant Surgeon, Bristol General Hospital.

IN the endeavour to ascertain from experimental evidence the best method of fracture repair, a large amount of pathological material has been accumulated which has a general as well as a surgical interest. Nearly all my experiments have been done on cats, a few only being on rabbits.

Immobility in relation to repair.—There is a generally accepted theory that a certain amount of movement is almost necessary to repair, and this has by many been extended to imply that the movements of the bones at the site of fracture is positively desirable and beneficial. I have been quite unable to gain any experimental evidence of the truth of these theories.

Mobility in relation to callus excess.—But if there is doubt whether fixation and immobility ever conduce to want of repair, there is no doubt that mobility and faulty fixation lead to callus excess.

In cases where fixation allows a moderate but strictly limited movement, *e.g.*, where intramedullary pegs are used, there is found a callus condition, intermediate between that of absolute fixation and that of free mobility.

Callus excess produced by chemical stimulus.—In addition to mobility, any irritant, if not so severe as to injure the tissues, will cause a callus excess. The most remarkable means of exhibiting this is by means of pegs made of metallic magnesium. Within four or five weeks there occurs the almost complete absorption of the metal and the growth of a big callus deposit which becomes ossified very early.

(a) Abstract of Paper read at the International Congress of Medicine, London, 1913.

The production of a false joint.—In four cases a false joint has resulted from a failure of the method of fixation. Three of these were in femurs and only one in the tibia, the latter being in a rabbit, in which animal the fibula is so small and fragile, that it gives but little support to its fellow bone.

In all these cases, therefore, there was only one bone in the affected part of the limb—the method of fixation (plates in two cases and pegs in two) had given way early, and, as I used no external splints, there was free mobility from the outset. It seems only to be a question of degree whether a given mobility will produce a false joint or a vicious union with callus excess.

The rôle of cartilage in callus repair.—It is well known that cartilage takes a large part in the repair of fractures in animals, and the statement that it does not do so in man is possibly an assumption derived from insufficient opportunity for examination. The great bulk of callus is at one time laid down as cartilage, and that in the ossification of this cartilage the change begins at the margin of the bone fragments and thence invades the rest of the tissue.

I have never seen ossification beginning under the periosteum. At a later stage the zone of cartilage remains along the line of fracture after all callus elsewhere has ossified.

On the screwing of bones.—It has become the fashion lately to regard the fixation of fractures by plates and short screws as the routine procedure for cases requiring operation. But it does not need a very lengthy experience to prove that this method has drawbacks as well as difficulties.

Within a few weeks the majority of such plates become loose, the screws falling out into the soft tissues. Then, whether the object of the operation is attained depends simply on whether the screws have held long enough for callus fixation, and when the screws and plate once become loose, they usually cause a serious effusion, which breaks through the skin, becomes infected, and causes a sinus, which demands the removal of the foreign bodies.

All the experiments I have done fully confirm this clinical experience. In every case the screws worked loose from one end or another and displacement occurred.

In human surgery this tendency to displacement is combated by the use of retentive splints after the operation, but this will involve immobility of joints and muscles, which it should be one of the objects of operative treatment to avoid. The short screw, which only bites by a sharp edge into a thin plate of hard bone, will inevitably pull out within one or two weeks if it is subject to much tension.

Fixation by perforating screws or pins.—A screw or pin, in order to take a firm hold of the bone and secure a grip which will not soon give way, must go through a whole thickness of the bone and hold by means of a nut or turned-over ends. Such fixation will remain permanently or for an indefinite time. There has been an idea that plates and screws become loose and are extruded, simply because there are foreign bodies or because sepsis has been introduced with them. I think this is borne out by the facts of experiment. A large plate firmly fixed will remain in place indefinitely, whilst a small plate and screws which work loose soon cause a sinus and have to be removed.

On direct methods of fixation.—Methods of fracture fixation which do not involve direct exposure of the seat of injury give the most ideal results. Rapid union with minimum callus formation occurs with perfect regularity. In particular the formation of the internal callus takes place under these circumstances with much greater nicety than when the fracture ends have been much manipulated.

Relation of the periosteum to the repair of fractures.—In a number of my experiments, I have endeavoured to ascertain the *rôle* of the periosteum in the reparative process. In simple fractures in which the ends of the bone were surrounded by a thin sheet of metal which was placed beneath the periosteum so as to exclude it, it will be seen that repair has followed a normal course. In a tibia shown ten days after the operation the surface of the bone is seen to be rough and pitted, and it is covered by granulation tissue. This is the early stage in the laying down of external callus, which is taking place from the bones, separated from its periosteum. In a tibia 20 days after the operation, cut down the middle, it is seen that the callus is well advanced in its formation under the plate, and that it is extending from the ends of the plate under the periosteum.

In studying the phenomena of repair in comminuted fractures, I found the double transfixion apparatus of great service in keeping the bones in good position, and I consider that such an appliance is of the greatest practical utility in the treatment of both compound and comminuted cases. If the fragments are removed, the periosteum restored to its position, and the ends of the main parts of the bone kept apart at their original distance, repair hardly occurs at all, or very slowly. In a tibia 42 days after such treatment it is seen that the union is by fibrous tissue only, and the little bone tissue that is growing with this is sprouting out from the bone ends, and not being laid down from the periosteum.

These experiments are in complete accord with Macewen's observations. They show that the periosteum itself lays down no new bone. New bone formation occurs from the cut surface of the bone, either from the main shaft or still more rapidly from separate fragments. Still the periosteum has an important *rôle*, inasmuch as it is the chief vascular supply to the area of repair. If it is excluded from this, the callus can only receive nourishment from the two ends of the area involved, and not from the side, and therefore repair is slower and weaker than is the case when the periosteum is in its normal position.

Summary of Conclusions.

1.—Screws which merely bite into the side of the bone will rapidly loosen by a process of bone absorption, if they are subjected to much tension. They are therefore unsuited for the operative treatment of fractures.

2.—Absolute fixation of fractured ends is conducive to good repair.

3.—The only way in which fractures can be firmly united by plates is by the use of pins, screws, and nuts which perforate the whole thickness of the shaft.

4.—Great mobility of the ends of a fractured bone is likely to produce a false joint, especially in the case of a single bone like the femur.

5.—Marked mobility of the ends of a fractured bone cause a great excess of callus.

6.—Metallic magnesium is absorbed in a bone and causes great callus excess.

7.—Indirect methods of fracture fixation give the most ideal results, and this is the only method possible when dealing with compound and comminuted cases.

8.—The periosteum has no power of forming callus or new bone.

9.—The periosteum is of great value in serving as the chief blood-supply to the callus and in limiting its extent.

10.—Active callus and bone formation always occur from the broken surface of the bone and every small fragment acts as a centre of new bone growth.

SYPHILITIC DISEASES OF JOINTS AND BONES IN CHILDHOOD—THEIR DIFFERENTIAL DIAGNOSIS FROM THE MEDICAL STANDPOINT. (a)

By SYDNEY A. OWEN, M.D.,
Assistant Physician, West London Hospital.

Mr. Addison has recently outlined for us, from the surgical standpoint, the more common bone and joint lesions which may be met with in infancy and childhood of a syphilitic nature. Clearly it is important to realise that the so-called specific epiphysitis of infants is really a lesion of the diaphysis rather than of the epiphysis. I am not surprised to hear this lesion frequently occurs apart from other manifestations of the disease. This is quite in harmony with my own experience. I think one of the main reasons why so many of us tend to overlook syphilis in young subjects is because we expect to find classical signs of congenital syphilis in conjunction with the particular lesion we are considering.

The Wassermann reaction.—Inasmuch as a positive Wassermann reaction, if performed in accordance with one of the recognised methods, affords almost certain proof of syphilis, the importance of employing this test in doubtful cases, where opportunity offers, cannot be over-estimated. From my own investigations I would say a very high percentage of congenital syphilitic children give a strongly positive Wassermann reaction, so that a negative result is stronger evidence against congenital syphilis than is the case when we are dealing with acquired syphilis of older persons. Further, once a positive reaction is present, treatment with mercury is of less avail in converting it into a negative reaction. As a guide to treatment, therefore, the repetition of the test is not of such great value.

I have been asked to draw your attention to some of those conditions which the physician conceivably may confound with syphilitic bone and joint disease in infancy and childhood. As the time at my disposal is limited, I will endeavour to confine my attention to a few conditions and not to attempt to cover the whole ground.

In infants under one year no joint affection, with the rarest possible exception, is due to rheumatism.

Putting aside suppurative lesions for consideration by members who are interested in the surgical aspect of the question, confusion is likely to arise in *atypical cases of infantile scurvy.* Common to both we have swollen, tender limbs and pseudoparesis. Some distinctive features are as follows. (1) The syphilitic lesion *as a rule* occurs at a much earlier age. (2) Scurvy bears a definite relation to certain patent foods and condensed milk. (3) In scurvy the lesion is more likely to be symmetrical, and the demonstrable physical signs point to a lesion of the shaft rather than of the end of the bone. (4) Spongy gums, subconjunctival hæmorrhages, epistaxis, hæmaturia, and melæna do not occur in syphilis. (5) The constitutional state in recent scurvy is more frequently good; in the syphilitic infant *marasmus* may be a concomitant. (6) Whilst an appearance suggestive of "raising of the periosteum" in the X-ray plates is common to both, the bony changes met in syphilis do not occur in uncomplicated cases of scurvy. I hope some of our guests here to-night and members will tell us the earliest age that they have met with infantile scurvy. Can the swelling of a large bone such as the femur, existing alone and in the absence of other confirmatory signs, be due to scurvy? Has anyone any experience of scurvy in breast-fed infants or in infants fed on unboiled cow's milk?

In marasmic infants, especially those suffering from chronic enteritis, or in infants previously healthy but recovering from an acute summer diarrhœa, an œdematous condition of the lower tibiæ and puffy feet can hardly be mistaken for a lesion due to syphilis if the condition is borne in mind. In such cases tetany is a not uncommon concomitant.

In children who have reached the "walking period" I would draw your attention especially to (1) the hyperæsthesia, subjective pains and pseudoparesis seen, not infrequently, in fat, *rickety* children. As a rule the evidence of rickets is forthcoming: the physical signs in the shafts, epiphyses and skull-bones are characteristic. There is no swelling and no œdema. Where syphilis and rickets are combined the diagnosis is sometimes, for a while, very difficult. (2) The acute hyperæsthesia, the toneless, flabby state of the muscles, which may precede for a short time the definite onset of paralysis and loss of deep reflexes in cases of early *poliomyelitis* must be borne in mind, especially where the typical constitutional symptoms and the early onset of definite palsy are in abeyance.

Injury.—I am afraid I must acknowledge falling only too recently into the error of mistaking for a fracture with effusion of blood a gummatous periostitis at the upper end of the humerus in an infant, aged four months, where the well-being of the child, the absence of confirmatory evidence of syphilis and all constitutional symptoms, in addition to the history of a definite injury, led me astray. I have made, too, the opposite mistake of thinking that a traumatic periostitis in a boy, aged 11, at the lower end of the radius and ulna was due to syphilis where the history of injury was not forthcoming at first, and where a negative Wassermann reaction and rapid complete recovery, apart from treatment with mercury, showed that the diagnosis of syphilis was, in all probability, quite incorrect.

If we bear in mind two or three well-established clinical facts with regard to *rheumatism* in children, we shall not be likely to fall into the error of confounding a rheumatic joint lesion with other affections, of which syphilis and tubercle are two very important causes. May I remind you (1) that true rheumatism is practically unknown in infancy; (2) that the arthritis is usually the least obtrusive sign of the rheumatic symptom-complex in children; (3) that the absence of grave constitutional symptoms and high fever is the rule and not the exception; (4) that the co-existence of any evidence of endocarditis, myocarditis, or pericarditis, choreiform movements or nodules point to rheumatism as the cause of an arthritis, however anomalous the joint lesion may be. Where acute rheumatism commences with monarticular involvement of a large joint, such as the hip or shoulder, without any evidence of endocarditis or nodules, etc., the differential diagnosis is a matter sometimes of extreme difficulty. Time, and careful observation from day to day, can alone decide the true nature of the affection. In my experience the therapeutic test of salicylates does not always give the assistance we need and sometimes expect. I should like to hear from Dr. Still the earliest age at which he has met with acute rheumatism.

(a) A paper read before the West London Medico-Chirurgical Society on March 7, 1913.

Osteo-arthritis and rheumatoid arthritis.—I have never had under my own care a case of Still's disease. I hope we may hear more from Dr. Still of this interesting disease and concerning those forms of destructive bone lesion resembling osteo-arthritis of the adult. I think I am right in stating Dr. Still believes the latter to be due in some cases to syphilis. (*a*)

In *purpura rheumatica* so-called, painful swollen joints and œdematous limbs are met with. We are here dealing, in all probability, with some toxic blood state. Although the symptoms and signs at first may be indistinguishable from hæmophilia, the two conditions are fundamentally different. Grave constitutional symptoms, high fever, spongy gums, and a septic mouth assist in the diagnosis.

A typical case of *erythema nodosum* should give rise to no difficulty in diagnosis. The appearance of the rash may be preceded by pain in the limbs. The eruption itself consists of large oval swellings of a rosy red tint. The extensor surface of the limbs is the site of election. They may be exquisitely tender; rarely they may be so soft as to give rise to the sensation of semi-fluctuation. The forearms and other parts of the body may be attacked. They tend to occur in crops. Though frequently occurring in rheumatic subjects, it is well known how refractory they are to salicylates. They may or may not be accompanied by recurrent and migratory joint swellings. In tubercular subjects typical lesions are seen.

In *leukæmia*, especially the acute form, joint swellings and œdema, for instance at the lower end of the tibia, are occasionally seen. I recall the case of a male child, aged four, who was brought for wasting, pallor, and "rheumatic pains" in the fingers, arms, and legs. All the superficial glands were prominent; the spleen was enlarged. The left ankle-joint was swollen. There was a tender œdematous swelling at the lower end of the left tibia. The child was wasted, pallid, acutely ill with septic gums. A blood-count showed 3,800,000 reds and 31,500 whites, with 95.25 per cent. of lymphocytes. After admission the wrists and shoulder-joints were painful; the temperature varied between 101 deg. and 105 deg. F. At the *post-mortem* the typical changes associated with acute leukæmia were found.

Gonorrhœal arthritis.—Mr. Clement Lucas, in 1885, I believe, first drew serious attention to this condition. Despite the fact that the eye condition is so common in infancy, the joint complication is a far from frequent event. There would appear to be two forms: (1) an acute one, with features suggesting suppuration; and (2) a milder form, accompanied by a great deal of effusion and pain on movement, but with little or no surface redness. (*b*)

Extension of the swelling beyond the joint cavity is apt to occur. Effusion into the tendon-sheaths has been noted by Mr. Sydney Stephenson. The knees and wrists are the joints most commonly involved; in other cases the shoulder and elbow. The prognosis is favourable if suitable treatment for the eye condition is carried out. The co-existence of ophthalmia in a case of this type points to the true diagnosis of the joint lesion.

Clutton's symmetrical synovitis.—We are all familiar with these cases of synovitis, painless as a rule, to which Mr. Addison has alluded in his paper. It is usually stated to have the same age-period as interstitial keratitis. Sometimes it is associated with that condition. I should like to hear from members of the Society the earliest age at which this condition may occur. What is the frequency with which interstitial keratitis is found associated with it? Are symmetrical swellings of joints other than the knees and ankles common?

The most recent instance I have seen of this type of case was the case of a child, Doris H., aged eight. The swelling had existed for two months. Pain was not a feature. The true condition had been clearly overlooked. There were no stigmata of congenital syphilis. The family history gave no assistance. There was no evidence of interstitial keratitis, but the Wassermann was strongly positive. The swelling subsided after the exhibition of mercury and iodide. Personally, I do not think this type of case is common, unless I am constantly falling into the very error I wish to avoid.

Hæmophilia.—In this condition there is a sudden effusion into one or more joints, occurring spontaneously or as the result of a trivial injury. The more rapid the effusion the more painful the condition. A certain degree of pyrexia may be present. The joint most commonly involved is the knee-joint, but the ankle, hip, shoulder and elbow may also suffer. Occasionally there are pains in the limbs and no joint swelling. The disease rarely manifests itself for the first time under one year. Some manifestation is rarely delayed until after puberty. If the family tendency is known the diagnosis is not difficult. When the family history cannot be elicited a co-existing purpuric eruption or bleeding from mucous membranes may point the way to a correct interpretation of an anomalous joint swelling. Considerable difficulty arises where a pleural effusion or pericardial lesion co-exists with the joint affection.

Charcot's joint.—I have never seen a Charcot's joint in a child. The youngest patient I have seen with a joint of this nature was a youth, aged 16 (*a*): he sought advice for swelling of the right knee-joint and difficulty with his walking. He looked very delicate. The joint was much swollen and partial subluxation was present. It presented the features typical of the hypertrophic type of the malady: partial subluxation, soft crepitus, and hypertrophied synovial folds with loss of normal outline. The right ankle-joint presented a very similar appearance. The affection was quite painless. The knee-jerks were absent. The pupils were sluggish in their reaction to light, and there was distinct blunting to pin-point up to the knees. There was no evidence of syringomyelia.

Gout.—If this condition is borne in mind it can hardly give rise to difficulty in diagnosis, and I will content myself by quoting a statement made by the late Sir William Roberts: "Where there is a strong hereditary tendency the onset is often earlier—young men and even boys at school may undergo typical joint attacks." (*b*)

(*a*) Dr. Still, *Practitioner*, July, 1904, p. 100.
(*a*) Hawthorne, "Studies in Clinical Medicine," p. 69.

(*a*) Owen, Sydney A., *Clinical Journal*, October 30th, 1912
(*a*) Sir William Roberts and Sir John Rose Bradford, "Allbutt's System of Medicine," vol. iii., p. 124.

Late rickets.—The bony changes resemble those seen in rickets when it occurs at the usual age. The age of onset of this rare condition is between three and ten years. Though the skeletal changes are similar, it is interesting to note that dietetic treatment is of little avail.

In this brief survey of some of the conditions which, I think, we may possibly confound with syphilitic bone and joint disease, I have made no mention of lesions of the cranial bones. I hope members will give us their opinion as to the value of cranio-tabes, Parrot's nodes, from the diagnostic point of view.

I have made no mention of osteogenesis imperfecta, osteopsathyrosis, or mollities ossium. Is there any evidence, recently accumulated, to show that syphilis bears any relation to this condition?

If time permits I should like to hear what importance members attach to the presence of enlarged epitrochlear glands, (*a*) Moon's molars, and blue sclerotics, (*b*) enlarged spleen and persistent laryngitis.

DIVERTICULA OF THE LARGE INTESTINE. (*c*)

By R. W. MURRAY, F.R.C.S.,
Surgeon, Northern Hospital, Liverpool.

The clinical manifestations of diverticula of the large bowel are by no means fully appreciated by surgeons, and are practically unknown to the majority of the members of the profession engaged in general practice. Though isolated cases of this nature have been observed and reported upon during the past fifty years, it is only during the last few years that attention has been especially directed to this subject.

This has been done chiefly by Dr. Maxwell Tilling, of Leeds, who published a most interesting and practical paper on "Acquired Diverticula of the Sigmoid" in the *Lancet* of March 21st, 1908. The following remarks are based upon Dr. Tilling's observations, whose original paper should be studied by anyone interested in the subject.

During the last few years several cases of so-called "diverticulitis" have been under my care, and a week ago a case presented itself under the following circumstances:—

A man, 67 years of age, who had never suffered previously from any abdominal illness, was suddenly seized with acute pain in the abdomen. The attack occurred in an outside water-closet, and was so severe that he had difficulty in crossing the yard to the house. His wife and daughter assisted him upstairs to bed. The pain increased in severity, and was accompanied by vomiting.

On the third day of his illness he was admitted to hospital under my care. When I saw him he looked very ill, and by his bedside was a porringer containing dark offensive fluid he had vomited. He complained greatly of pain over the lower abdomen, which was slightly distended and very tender. The tenderness was not more marked on one side than the other. His temperature was 101, and his pulse-rate 124. His bowels had been opened freely the day before his admission.

There could be no doubt that the man was suffering from perforative peritonitis, but there was nothing in the story of his illness to indicate what viscus had given way. An operation offered him the only chance he had of recovery; and as the odds were strongly in favour of the vermiform appendix being the viscus at fault, I opened the abdomen in that area. A considerable quantity of brown offensive fluid escaped; the appendix was not felt, and no search made for it. A large drain was inserted, and the man taken back to bed.

He died the following evening. At the autopsy there was general peritonitis due to a perforation of a gangrenous diverticulum of the large bowel. In the pelvic colon were numerous diverticula, some very small, others large enough to project an appreciable distance from the wall of the gut. It was one of these large diverticula that had perforated. On opening the colon it was seen to contain numerous fæcal masses like rabbit "droppings." The small diverticula were for the most part empty, but all the large ones contained fæces. Corresponding to the level where the perforation had occurred, there was considerable thickening of the bowel wall, causing a marked constriction. There was no ulceration of the mucous surface.

My object in relating this case is to draw attention to a complaint which has certainly not received the attention it deserves. I am sure it is far more common than is generally supposed, and may present itself in various clinical aspects. Perhaps the most common form is as a stricture of the large bowel, which in many cases has been regarded as malignant. Since attention has been directed to this subject many museum specimens labelled "carcinoma of the sigmoid" have on microscopical examination proved to be inflammatory and of diverticular origin. This is a matter of great importance, and I wish to make a suggestion that I believe may be of assistance in arriving at a correct clinical diagnosis.

In the case I have related, and also in a case I saw some years ago, when the colon was opened it was seen to contain numerous fæcal masses like rabbit "droppings." These fæcal balls are undoubtedly formed in the small diverticula, which have a relatively large mouth and are covered by muscular fibres sufficiently powerful to enable them to expel their contents into the lumen of the bowel.

The point I wish to make is this: if in a case of obstruction of the large bowel fæcal masses like rabbit "droppings" are passed, the stricture is of an inflammatory nature and not cancerous. To put it in another way: what blood in the motions is to a malignant growth, these fæcal balls are to an inflammatory mass due to diverticula.

The larger diverticula cannot expel their contents because the stretched muscular fibres are replaced by fibrous tissue, and also because the mouths of these diverticula are so relatively small. Subsequent inflammation, due to the presence of imprisoned fæcal masses or concretions, may give rise to symptoms closely resembling left-sided appendicitis, or one of them may perforate as in the case I have related.

As to the ætiology of these diverticula, they must be either congenital or acquired. They may occur in the large or small bowel; and as they are met with most commonly in elderly persons in the region of the sigmoid, they are usually believed to be acquired. Old age and constipation are said to be the chief causes; but old age and constipation are much more common than diverticula. Again, many of the patients have not suffered from constipation, and several of them have not been old. The youngest recorded case occurred in a female, 22 years years of age. Comparative anatomy does not throw any light upon the subject, so far as I can ascertain, for similar diverticula are not normally present in the bowel of any animal. I believe that the primary factor is almost certainly some congenital defect in the structure of the intestinal wall. The probable reason why diverticula of the large bowel

---

(*a*) Rolleston, J. D., *Brit. Journ. Child. Dis.*, 1911, p. 202.
(*b*) Reiche, A., in *Archiv. Pediat.*, vol. xxv., 1908, p. 946.
(*c*) *Liverpool Medico Chirurgical Journal*, January, 1913.

have not been observed in young persons is because they give rise to no symptoms apart from inflammatory trouble in connection with their contents, and also because they have never been looked for.

The points I wish especially to emphasise are :—

(1) That left-sided appendicitis in elderly persons is probably due to an inflamed diverticulum.

(2) That perforative peritonitis in elderly persons may be due to the same cause.

(3) That if masses like rabbit "droppings" are found mixed with the fæces, it is a clear indication that there are diverticula present in the large bowel.

THE VALUE OF "OMNOPON" AS A GENERAL SEDATIVE. (a)

By C. L. WILLIAMSON, M.R.C.S.Eng., L.R.C.P. Lond.,

AND

G. W. N. JOSEPH, M.D., B.Ch., D.P.H. Liverpool,

Assistant Medical Officers.

Opium (writes Trotain, of Paris) is one of the most important drugs which our therapeutic arsenal possesses. The variety of its properties, its efficacy, its rapidity of action, all explain its importance and popularity. But opium has its faults ; for there is not one, but many opiums. Furthermore, its insolubility and the impossibility of administering it subcutaneously constitute a serious objection to its use ; in many cases, it is true, one can substitute the soluble hydrochloride of morphine for insoluble opium. But, if morphia possesses most of the qualities and defects of opium, it still differs from it in several points. Morphia has the disadvantage of being more depressant, more drastic in its action, more toxic, and having a greater disposition to cause intolerance.

It is therefore obvious that it would be to our advantage to possess a drug which would be a definite combination of all the alkaloids of opium, which would have all its beneficial properties and none of its disadvantages, which would be soluble, injectable, better tolerated by the human organism and less predisposing to a craving of habit (Trotain, "Contributions de l'Etude Thérapeutique de l'Opium et des ses Nouvelles Preparations").

This combination seems to have been successfully effected by Dr. Schaerges, chemist of the Hoffman-La Roche Company, acting on suggestions from Professor Sahli, of Berne, as a result of the latter's experiments with the alkaloids of crude opium in the early part of 1909. (b) To the drug the name of "Pantopon" was given, and as such it is known on the Continent and in America, whilst in Great Britain the name "Omnopon" was substituted.

The product is a crystalline powder of light yellow colour, readily soluble in cold water, less readily in alcohol, and only giving a weak acid reaction with litmus paper,

Before proceeding further with the clinical aspect of omnopon it would perhaps be interesting to make some reference to the composition of opium.

The average specimen of opium yields the following percentage of alkaloids :—

Morphine	10%—12%
Codeine	·3%— .6%
Anarcotine or Narcotine ..	7%
Papaverine	1%
Thebaine	.15%— .3%
Narceine	.02%

But, as already mentioned in the extract from Trotain's paper, samples of opium vary widely in the amounts of their alkaloids, the Smyrna and Constantinople drug being the nearest approach to "Official Opium," whilst that of Egypt and Persia is of an inferior quality.

In determining the value of opium the morphia content is the only factor which is usually considered. It is interesting to note, however, that apart from the alkaloids above mentioned at least fourteen other bases have been isolated, namely :—

Hydrocotarnine ..	$C_{12}H_{15}NO_3$	Hesse	
Codamine	$C_{20}H_{25}NO_4$	Hesse	1870
Laudanine	$C_{20}H_{25}NO_4$	Hesse	1870
Laudanidine ..	$C_{20}H_{25}NO_4$	Hesse	1894
Laudanosine ..	$C_{21}H_{27}NO_4$	Hesse	1871
Meconidine ..	$C_{21}H_{23}NO_4$	Hesse	1870
Papaveramine ..	$C_{21}H_{21}NO_3$	Hesse	1886
Protopine	$C_{20}H_{17}NO_5$	Hesse	1870
Lanthopine.. ..	$C_{23}H_{25}NO_4$	Hesse	1870
Cryptopine ..	$C_{21}H_{23}NO_5$	Smith	1857
Gnoscopine ..	$C_{22}H_{23}NO_7$	Smith	1878
Oxynarcotine ..	$C_{22}H_{23}NO_3$	Smith	1878
Xanthaline ..	$C_{37}H_{36}N_2O_3$	Smith	
Tritopine	$C_{42}H_{54}N_2O_7$	Kauder	1890

In addition to these there is a series of indifferent crystalline substances, such as meconin, meconoidin and opionin, which are present only in very small proportions.

In omnopon the alkaloids of opium are presented in the form of soluble hydrochlorides, while extractive matter and all inert bodies are eliminated.

The equivalents of omnopon are as follows :—

$$1 \text{ gr. omnopon} = \begin{cases} 5 \text{ grs. opium.} \\ 75 \text{ m. tinct. opii, B.P.} \\ 2\frac{1}{2} \text{ grs. ext. opii, B.P.} \end{cases}$$

Dosage and Mode of Use.—Omnopon is supplied to the medical profession in the followng forms :—

(*a*) A sterile 2 per cent. solution in ampoules containing 1.1 c.c. There is $\frac{1}{3}$ gr. of omnopon in 1 c.c. of this solution.

(*b*) Tablets of gr. $\frac{1}{6}$ which are readily soluble in a little cold water and act more rapidly if prescribed in that manner.

(*c*) Powder. This can be made up in a 2 per cent. solution, and can be kept for use for some time with the addition of 5 per cent. to 10 per cent. of alcohol.

(*d*) In ampoules with scopolamine, for use prior to the induction of anæsthesia for operation. These ampoules each contain omnopon .04 grm. and scopolamine .0004 grm. The contents of one is injected about two hours prior to operation.

It has been our custom to give doses ranging from gr. $^1/_{12}$—gr. $\frac{1}{3}$, but necessarily one must be guided by the requirements of each individual case. We never exceed gr. $\frac{1}{3}$ for a single dose, and have generally found that amount to be quite sufficient. For urgent symptoms we use the hypodermic ampoules and find the action extremely rapid.

Gr. 1 of omnopon is equivalent to m. 75 of tinct. opii (B.P.) and thus our maximum dose corresponds to m. xxv. of the official tincture.

Indications for Use.—Exactly the same as those calling for the employment of morphia or opium.

Clinical Use of Omnopon.—As our experience with omnopon is derived from observations of over 500 cases of all kinds, we think it might be of interest to mention, with details, some types of disease in which we found it beneficial. Furthermore we should explain at the onset that all our earlier cases received omnopon only after other drugs had been tried.

I.

Pulmonary Tuberculosis.—Over 200 cases of phthisis in our wards have received omnopon at various times and for various symptoms. The outstanding feature of the drug in this complaint is its power of relieving cough. Formerly our cases received glycoheroin, linctus simplex containing tinct. camph. co. m. xx. per dose, linctus opiatus, syr. codeinæ, heroin, and frequently all were useless. We then resorted to omnopon and with gratifying results. The purposeless, irritating, dry cough rapidly yielded to gr 1-6 4 hours, or when required.

(*a*) With cases under the care of Dr. Nathan Raw at the Mill Road Infirmary, Liverpool.

(*b*) Sahli, *Munchener Medizinische Wochenschrift*, No. 26, 1909; *Therapeutische Monatshefte*, No. 1, 1909.

In advanced pulmonary tuberculosis, probably more than in earlier lesions, is the extreme value of omnopon shown. It relieves the cough, the patient gets a thorough rest all night, wakes up comparatively fresh the next day, does not complain of headache or nausea. The drug does not affect the appetite, as morphia does, and as the patient becomes more comfortable he is able frequently to take more food. In several cases there has been a marked diminution of the night-sweats in patients getting omnopon regularly.

We have, in addition, found omnopon very successful in the treatment of other phthisical symptoms, such as dry pleurisy, diarrhœa, and insomnia.

Cases of hæmoptysis received a hypodermic injection of gr. $\frac{1}{3}$, and it is quite as successful in controlling hæmorrhage and calming the patient as larger dose of morphia. The following are the notes of three typical cases :—

Case 1.—J. J.,male, æt. 37, advanced ph. Admitted March 30th, 1911. Very troublesome cough ; keeping patient awake at night. Poor appetite. Was ordered, at different times, syr. codeinæ 1 dr. 4 hours, glyco-heroin 1dr 4 hours ; liq. morphinæ hydrochlor. m. xxx. 4 hours, during night, and a mixture containing acid hydrocyanici dil. and tinct. opii daily. All these had little effect. On May 17th, 1911, received gr. $\frac{1}{3}$ omnopon at night. Next morning the patient felt much better and said that he had had a splendid night.

Case 2.—William B., æt. 57. Admitted May 3rd, 1911. Suffering from phthisis with paroxysmal dyspnœa and distressing cough. Spt. ammon. aromat., ammon. carb. and pot. iodide, codeine, and finally morphia and opium, all failed to relieve to any great extent. On May 12th, 1911, received at night a subcutaneous injection of gr. $\frac{1}{3}$ omnopon about 8 p.m. Went to sleep at 9.45 p.m. and slept well for 3 hours. Woke up coughing, but slept for another three hours after receiving syr. codeinæ 1 dr. Woke up fairly fresh and with no headache. This night was characterised by a sound sleep and absence of dyspnœa, from which latter he almost invariably suffered in the early morning.

Since that date he has had occasional attacks of nocturnal dyspnœa, which never failed to yield to gr. $\frac{1}{3}$ of omnopon, and the patient is quite enthusiastic with the speedy relief afforded.

Case 3.—Mary C., admitted with advanced phthisis. Complains of marked dyspnœa—troublesome cough and sleeplessness.

For six consecutive nights was given a subcutaneous injection of omnopon gr. $\frac{1}{3}$. On each occasion she had a good night, slept well, cough much less, and altogether felt marked relief. There were no after-effects such as headache or nausea.

II.

Cancer.—We have treated, up to date, 40 cases of inoperable cancer with " omnopon " comprising, in their order of frequency, growths of uterus, rectum, breast, intestine, stomach, mouth and lung.

In this disease the action of omnopon is quite as constant as in phthisis. Some of our patients have received doses of gr. $\frac{1}{3}$ only when the pain is paroxysmal, but others, where constant pain has been complained of, have taken gr. $\frac{1}{6}$ 4 hours, for weeks at a time. We noted that, as in phthisis, the appetite is but little affected, the bowels remain regular, pain is relieved, the cases sleep better and longer, and existence is rendered as tolerable as possible in this distressing disease.

Type of Case.—B. P., æt. 51. Admitted on May 10th, 1911, with advanced carcinoma cervicis uteri. Complained of constant abdominal pain and restlessness. Was ordered omnopon gr. $^1/_{10}$ hourly until the pain was relieved. Received three doses and slept for four consecutive hours. At 10 p.m. again complained of pain and had another gr. $^1/_{10}$. Pain left her and she slept until 4 a.m. the following morning—May 11th, 1911. On May 17th, 1911, although the omnopon had been discontinued on the 11th, she had had no further pain and felt much better. No headache, nausea or subsequent constipation.

III.

The third class of cases is composed of those diseases where chief symptoms are pain, diarrhœa and vomiting of whatever nature. Here again we have found omnopon of great value as an adjunct to the recognised methods of treatment. The harassing pain of gastric ulcer and carcinoma soon yields to omnopon in repeated gr. $\frac{1}{6}$ doses, or occasional gr. $\frac{1}{3}$ doses by mouth as required.

" Omnopon," in several of our cases, has checked persistent vomiting when bismuth alone or in combination with liq. morphinæ hyd. or tinct. opii has failed. It has, moreover, the additional advantage over morphia of not predisposing to subsequent retching. Döblin in a paper on " Pantopon " (omnopon) states that one of his reasons for preferring the pantopon to morphia is the dispositon of the latter to cause vomiting and nausea. This tendency he finds practically nil after pantopon. (*a*)

In diarrhœa and intestinal catarrh, omnopon reduces the congestion and lessens peristalsis. In the persistent diarrhœa of advanced phthisis, we have frequently found it to act quickly and successfully when repeated doses of morphia have had little or no effect. Our custom has been to give it, for this type of case, after the patient has fasted absolutely for three to four hours.

In addition to the above it might be of interest to mention that two cases of hyperemesis gravidarum yielded to omnopon after bromides, bismuth, chloretone, oxalate of cerium and morphia had been tried unsuccessfully.

We quote one case to illustrate this class :—

Mrs. B.—Gastric ulcer and hæmatemesis. May 16th, 1911, severe epigastric pain and vomiting. Had omnopon gr. $\frac{1}{6}$ by mouth. Had a fair night ; did not sleep particularly well, but had relief from pain for some hours. Patient stated that relief was more marked than that afforded by the mixture she had previously been taking, viz., bismuth subnit. gr. x. and liq. morphinæ hyd. m xx.—4 hours.

IV

In cardiac lesions with precordial pain, angina palpitation and dyspnœa, we consider omnopon of the greatest value, and the speedy relief at times afforded is little short of wonderful.

V.

Omnopon, with advantage, can be utilised in the first stage of labour. It eases the severity of the pains without in any way diminishing the force or duration of the uterine contractions. Therefore we have a means of relieving, without unduly protracting, the long primary stage in the primipara.

VI.

The dyspnœic attacks of bronchial asthma rapidly subside when treated by a subcutaneous injection of gr. $\frac{1}{4}$ omnopon. One of our own cases, who was invariably relieved by the subcutaneous injection of adrenalin m.v. of a 1-1,000 solution, expressed a decided preference for omnopon " as it acted more quickly." In asthma it acts almost as well, when given orally, as subcutaneously.

VII.

Surgical Indications for Omnopon.—We regard post-operative conditions as offering a wide field for the use of omnopon. Under this heading we propose to describe our experience with omnopon-scopolamine adminstered before operation. Our cases were all adults and received one ampoule, containing omnopon 0.04 grm. with scopolamine 0.0004 grm., injected subcutaneously about 2 hours before operation. The anæsthetic in all cases was an equal mixture of chloroform and ether, with the occasional substitution of open ether. We noted, that in all save two instances there was an absence or diminution of the stage of excitation ; the breathing,

---

(*a*) *Therapeutische Monatshefte*, April, 1911.

when anæsthesia was complete, was regular and rather slow, as was the pulse. Moreover, it was found that the smaller amount of anæsthetic than usual was needed to keep the patient under; there was absence of salivaton when open ether was substituted for the C.E. mixture. As mentioned above two of our cases were exceptions, there being a prolonged stage of violent excitation and struggling; during the operation the anæsthetic had to be freely pushed. Both these cases were definite "alcoholics."

For a fuller description of omnopon in anæsthetic and surgical work we would refer the reader to the admirable articles of Gray (*a*) of Aberdeen, and Leipoldt. (*b*)

A striking feature of these cases was the excellent condition of the patient after operation. In our cases there was invariably absence of post-anæsthetic retching or vomiting, the patient was drowsy or slept comfortably for a few hours, the pulse was regular and not rapid, and pain was either slight or not complained of at all.

Omnopon can with advantage be substituted for morphia in the post-operatic stage, since it has less tendency to constipate or produce nausea.

VIII.

In Continental literature several authors have recorded success to omnopon in the treatment of cases of morphiomania, and it may be of interest here to give details of a case we had in this institution.

H. A., æt. 45, marine engineer, admitted October 3rd, 1911, suffering from alcoholism.

He had been drinking heavily and was very weak on admission. It was noticed that both arms were covered with scars resulting from hypodermic injections, and on being questioned he confessed to having taken morphia for over two years, and said that without it he could not sleep.

During the first week he had omnopon gr. $\frac{1}{3}$ by mouth twice daily, without knowing the nature of its composition, and towards the end of this time said he was feeling so much better that he thought he could do without morphia altogether when he got outside again.

The patient was in hospital for six weeks, and during the last five weeks had no treatment other than simple tonics. Since his discharge, three months ago, he has reported himself to us, and is looking so well as to quite bear out his statement that he has had no recourse to the drug since his treatment in hospital.

The following is a list of the last 500 cases treated by us with omnopon, and shows the class of case in which it has been of service:—

Pulmonary tuberculosis	229
Carcinoma	40
Chronic bronchitis'''	30
Pain of fractures, etc.	26
Cardiac diseases	23
Tubercular peritonitis, etc.	18
Acute abdominal lesions	18
Gastro-enteritis	17
Confinements	15
Acute pneumonia (early stage) ..	15
Alcoholism, mania, etc.	12
Bronchial asthma	11
Chronic rheumatism	10
Pleurisy	8
Specific	7
Myelitis and paraplegia	5
Chronic nephritis	4
Locomotor ataxy	3
Diabetes	2
Splenic leucocythæmia	2
Hyperemesis gravidarum	2
Chorea gravis	1
Pruritus vulvæ	1
Cerebral tumour	1
	500

Summary and Conclusions.

In conclusion we should like to emphasise the following points:—

(1) In omnopon we possess a preparation of fixed and unvarying composition, containing the chlorides of the total alkaloids of opium in a form which is soluble in water.

(2) We especially wish to draw the attention of the general practitioner to its value in those cases of advanced pulmonary tuberculosis where palliative treatment alone is possible. In this class of sufferer with incessant cough, drenching night-sweats, sleepless nights, dissatisfied with his medicine and food and discontented with everything around him, omnopon comes as a great boon.

(3) Again this preparation is most serviceable in all those cases of malignant disease where pain has to be relieved and the attention of practitioners may be drawn to the fact that omnopon written as a prescription, does not convery, to a timid patient or his friends, the same impression as the name of opium or its official derivatives.

(4) In all classes of cases, where one is compelled to use morphia, one can with advantage, in our opinion, substitute omnopon. This latter does not cause the same amount of subsequent nausea or constipation, nor does it appear to affect the appetite. One other rather important point is the fact that the patient does not appear to become tolerant of its use, and thus there is no need for increasing the dose. We have, in that connection noted that patients whose condition has improved, made no objection to the drug being discontinued, rendering the fear of the formation of a drug habit less probable than in the case of morphia or opium.

(5) It can be used in cases of chronic renal insufficiency in gr. $\frac{1}{3}$ does for dyspnœa, and Trotian has recorded its successful use in a case of uræmic dyspnœa and also in the delirium caused by cardiorenal intoxication.

We wish to express our thanks to Dr. Nathan Raw for kind permission to publish these cases.

A NEW METHOD FOR THE TREATMENT OF BACTERIAL INFECTIONS (A MODIFICATION OF VACCINE TREATMENT). (*a*)

By PROF. N. F. SURVEYOR, M.D., M.A.Bombay, M.R.C.P.Lond., D.P.H.Cantab.
Professor of Bacteriology, Grant Medical College, Bombay.

Treatment of diseases with bacterial vaccines has acquired a definite position in medicine in the course of the last seven years, and it is not necessary to bring forth any facts in support of it at this stage; rather one must be cautious in falling into the opposite error of using vaccines for all diseases that human flesh is heir to. I have not yet heard of anyone recommending this treatment for a broken limb, but I have come across a case where a patient was at least under the impression that his ventral hernia (about the size of a cocoanut) would be cured if he underwent a course of vaccine treatment for ulceration of the skin over the sac.

Since my last communication on vaccine therapy (1) 526 cases, including cases of tuberculosis, have been treated by me on similar lines, and I beg leave to place before the meeting a short account of my observations.

In the paper mentioned above I had stated that the staphylococcic vaccines, whether stock or autogenous, did not always give satisfactory results in cases of pyæmia, and it was suggested there that this might be due to the fact that there was infection with more than one microbe. This is quite likely to be the case, especially so if the other microbe is a streptococcus which, being a slow grower, is, as it were, swamped by the staphylococci and thus destroyed in the culture tube. This actually happened in a case of diabetic

---

(*a*) *Lancet*, September 2, 1911.
(*b*) *Lancet*, February 11, 1911.

(*a*) Paper read before the International Medical Congress in London, August, 1913.

gangrenous abscess of the foot. On the first occasion, when the pus was removed before the skin had ruptured, a pure culture of streptococcus was obtained. About two days later another sample of pus gave a pure culture of staphylococcus, and the vaccine prepared from this was useless, so that the disease spread very rapidly, and in a fortnight's time the question of amputation above the knee-joint was seriously considered by the physicians and surgeons who saw the patient. Besides the staphylococcic vaccine a stock streptococcic vaccine was also injected by the bacteriologist in charge of the case, and anti-streptococcic serum was also used at the same time without any benefit. However, as soon as the vaccine of the patient's own streptococcus was combined with his own staphylococcic vaccine a change for the better wsa perceived, and the patient make a complete recovery (Case No. 365 of my series).

In another case (No. 444 of my series) of diabetic abscess of the foot, a very instructive fact was noticed. The infecting microbes were a very short bacillus (non-motile) and a fine streptococcus, and the case was progressing satisfactorily when small carbuncles, about a dozen in number, formed on the back, neck and shoulders, in spite of the vaccine treatment which the patient was regularly getting. However, on examining the pus from the carbuncles a pure culture of staphylococcus aureus was obtained, and vaccine prepared from this had the desired result. Thus the patients had three infecting microbes at one and the same time, and combined vaccine was required for a complete cure. Now in this case the third microbe was the infecting agent for another part of the body, but it is quite possible that the germ may have gained entrance to the already infected area—namely, the foot, and vaccine treatment would have failed to bring about a complete cure unless another bacteriological examination of the pus had been made. Thus in such cases it is always advisable to have the pus re-examined from time to time if the progress is not satisfactory. These two cases, several cases of pyæmia, and pyorrhœa alveolaris have been treated by a modified form of vaccine, and with very good results. These modified vaccines I have called "autotoxins" or "autoxins" to distinguish them from the ordinary bacterial vaccines. In some cases the bacterial vaccine is prepared not with normal saline solution as a diluent, but with autoxin. These vaccines are called autoxin-vaccines; and have been found to be most effective in the treatment of bacterial infections.

It is well known that one often comes across cases where the causative organism of any particular lesion cannot be grown on any of the known media, thus making the preparation of a vaccine impossible. One such case I have come across (Case No. 45 of my series) where the patient was subject to subcutaneous abscesses of the type generally known as blind boils, which would come on, three or four at a time, at frequent intervals throughout the year. Repeated examinations of the pus failed to show any organisms in smears or in cultures. In a fresh preparation, cells with a certain amount of limited amœboid movement could be seen, but these proved to be leucocytes. Major Liston, Director of the Bombay Bacteriological Laboratory, also saw the case with me, and subjected the pus to a thorough examination by cultural methods, for which my thanks are due to him. He corroborated my observations. Stock staphylococcic and streptococcic vaccines were used at first without any benefit, so it was resolved to try a method which I had been considering for a long time as quite feasible for bacterial infections. This method is comparable with the vaccine lymph inoculation used for protection against small-pox.

The method as adopted by me is to take a measured amunt of pus and to dilute it with varying amounts of normal saline, so as to getdefinite dilutions of the toxins present in the pus. In this particular case I diluted the pus 25 times and sterilised it at 60° C. for one hour, in order to kill any organism which may have got in either accidentally or may have been the cause of the pus formation, but which was incapable of being cultivated on ordinary media. This dilution was used for injections, and the result was that the patient stopped getting any more abscesses, and was free from her trouble for the first time after many years. The illness had commenced when the patient was eight years old, and, at the time when she had the injections she was about 25. As Calmette's ophthalmo test was positive in this case at the second trial, she was given one injection of tuberculin in conjunction with "autoxin," but the effect of the "autoxin" when given alone was so marked in checking the appearance of the boils and aborting those that had already appeared, that the injections of the latter alone were persisted in with the most gratifying results. Besides this, the roughened character of the skin and low fever also disappeared under these injections, and the patient put on weight. The pus was injected into a rabbit and guinea-pig to see if any tubercular infection was present, but the result was negative. The positive ophthalmo reaction in this case meant that there must have been a small latent tubercular focus in the body, and I do not see any reason to attribute the boils to tubercle.

This method has been extended to other cases also, from which definite organisms could be developed, and some very good results have been attained. The method was found to be particularly applicable to certain cases that showed a large number of various organisms in smears of pus obtained with all bacteriological precautions, none of which, however, could be made to grow in the test-tube. The material in such cases was mostly foul smelling, although taken from unopened abscesses. The only explanation that I can offer is that the organisms were so devitalised that they were incapable of growing on artificial media. This was specially noticed in a rectal abscess, a scrotal abscess, and also in a case of abscess on the hard palate due to carious teeth. In the second of these cases a coliform organism was obtained in culture after great difficulty, and in the third a fine streptococcus was grown, while pus from the rectal abscess remained sterile, although in all these cases large numbers of diplococci, bacilli, and staphylococci were seen in smears from the original pus, which was extremely foul-smelling. In another similar case of abscess of the scalp no culture whatever could be obtained. In such cases this method has been found very successful. In all cases, wherever the pus can be obtained in a fair amount (at least 1.25 c.c.), this method had been used for preparing the "autoxin."

Strength of Autoxin.—Various dilutions of the pus (from 1 in 10 to 1 in 600) have been tried, and it was found that a dilution of 1 in 50 is suitable for most cases of staphylococcic infection and 1 in 100 for streptococcic infection. In cases of pyorrhœa alveolaris, greater dilutions (1 in 300 to 1 in 600) seem to answer better. Counting the number of bacteria injected for the purpose of standardisation, as is done in the case of ordinary vaccines, is not applicable here, as the disintegrated corpuscles and other débris interfere with the counting process; nor is this necessary. The strength of the "autoxin" can be fairly definitely adjusted by the amount of dilution used.

Class of Cases in which "Autoxins" are Useful.—Amongst the cases suitable for this mode of treatment may be mentioned cases of pyæmia, septicæmia, and the similar diseases, where there is no time to be lost. One of the greatest advantages of this method is that the first injection can be given within 18 hours after obtaining the material. This method is useful in another class of cases—*i.e.*, where a variety of organisms is present in a given sample of pus, so that it is very difficult to isolate the different kinds of bacteria and prepare a vaccine from each. In such cases at best a vaccine can be prepared from a mixed culture, and the relative proportion of each variety of microbe cannot be the same in the vaccine as that present in the *materies morbi*, on account of the varying rates of growth of the different organisms in the cultural media. Again, in the class of cases under consideration, it is often difficult, if not impossible, to fix upon any particular germ as the cause of the trouble, and more often than not the treatment of such a case is only a shot in the dark, when one uses a so-called predominant microbic vaccine.

Several cases of chronic bronchitis and of pyorrhœa alveolaris, four cases of gonorrhœal synovitis (in three of which the synovial fluid was sterile), two cases of mucous colitis, and one of cystitis, have been treated by this method with marked benefit. One hundred and one cases have been treated by this method with very good results, and without any severe reaction or untoward effect. A further improvement of this method as stated above is to use the "autoxin" instead of the normal saline for the preparation of a vaccine.

As stated above, pyæmia cases, from which Staphylococcus aureus is ordinarily isolated, did not respond satisfactorily even to auto-vaccine treatment. In such cases of injection of "autoxin" and "autoxin-vaccine" has given very satisfactory results (as in Cases Nos. 465 and 444 mentioned above, both of which had had vaccine treatment prior to the use of the autoxin-vaccine).

One case of chronic bronchitis with asthma has been treated by me with marked benefit by this method. The patient, whose original weight in good health was 141 lb. was found to weigh only 95 lb. when this treatment was adopted, although she was living in comfortable surroundings. The sputum did not show any tubercle bacilli. However, there were frequent attacks of slight hæmoptysis, and as the ophthalmo test was found positive, tuberculin treatment was given first. Although some benefit was noticed, there was a slight further loss of weight, and the relief from a harassing cough was only slight. An "autoxin" of the sputum, 1 in 50 dilution, was therefore given. The dose was 0.5 c.c. to begin with, and the largest dose given was 1.3 c.c. There was marked improvement noticed in general health, and in the beginning of the present year her weight was 126 lb., when she left Bombay for her home in Northern India. In all she had ten injections of this preparation. These were given at intervals of 15 days to one month, *i.e.*, on lines similar to those followed for vaccine treatment.

A case of pernicious malaria with a very large number of crescents in the blood was treated by a somewhat similar method, and as a sequence very rapid disappearance of the crescents occurred. Blood (6 c.c.) was removed from a vein, diluted with 100 c.c. of normal saline, and hæmolysed by addition of 5 drops of sodium hydrate (15 per cent. solution). With Thoma Zeiss hæmocytometer apparatus the crescents were counted in the diluted blood before the addition of sodium hydrate. The number of crescents present per c.c. of the diluted blood was 140,000. After addition of the sodium hydrate, the flask was left in the incubator for 24 hours and tested for sterility. The crescents in the patient's blood disappeared rapidly, *i.e.*, in 22 days. He had the largest number of crescents I have ever come across. Considering that crescents generally disappear in about two months in ordinary cases, this period appears to have been considerably shortened by this method. (2) In this case when the crescents were first counted, as compared with 100 leucocytes they were 112; and in one drop about 8 m.m. in diameter the number was 13,068. The dose given to start with was 1 c.c. and the fifth and last dose was 4.5 c.c. In another case with a huge spleen after five injections, although no reduction of the spleen was noticed, the patient's weight and general condition were much improved. Unfortunately the treatment could not be followed further.

As regards the treatment of pyorrhœa alveolaris with autoxin-vaccine some remarks are necessary here. The usual method adopted in the vaccine treatment of this disease is to isolate what is considered to be the predominating microbe, usually a streptococcus or a bacillus, and to make the vaccine from that organism. This method does not give very satisfactory results as regards the formation of pus, but amelioration of the other physical symptoms has been obtained. This result is to be expected considering that the micro-organisms are situated in the pockets between the gums and the teeth, and the antibodies are not likely to reach them in sufficient amount to cause their complete destruction. In fact, these organisms are extra corporeal, like the Bacillus coli is in the alimentary canal, and as any attempt to destroy the latter by vaccine treatment is likely to be of no avail, the same holds true for vaccine treatment of pyorrhœa alveolaris. The physical symptoms can only be relieved in so far as they are due to the microbes that have attacked the tissues. Those in other positions cannot be destroyed by vaccine treatment. The pockets in pyorrhœa must be cleansed with antiseptic washes at the same time that vaccine treatment is used. Again, in cases of this disease the number of varieties of microbes present renders the problem of vaccine treatment for this complaint one of considerable complication. Besides streptococcus and staphylococcus one meets with different varieties of bacilli including B. fusiformis and also spirochætes of various sorts. As if these were not enough, there are often seen in such pus, crowds of infusoria (Trichomonas buccalis) and amœboid organisms. However, on attempting to obtain a culture, one generally isolates a streptococcus or sometimes a bacillus, while the bulk of the organisms, especially the spirochætes and infusoria, cannot be cultivated on ordinary media. Now, the toxic symptoms in a case of pyorrhœa alveolaris are not only to be attributed to one variety of the organism which is capable of being isolated and used for vaccine, the other organisms must have some share in the production of the physical signs and symptoms which one notices in such cases. So it is not to be wondered at that very few cases of pyorrhœa alveolaris can get benefit by simple vaccine treatment only. In the autoxin-vaccine treatment of this disease the pus is sucked up from the gums by a double-bulb sterile pipette whose distal end is sealed, and the bulb, near this end, having been made red hot exerts suction on getting cold, the proximal open end of the tube having been introduced into the purulent pocket. The gum bleeds freely when this is done, and some blood also enters the pipette. When a sufficient quantity is obtained the open end is sealed off and the pipette is put into the incubator for about 24 hours. This ensures a further growth of the germs in the patient's own blood. Next day the whole quantity, the blood, pus, etc., is measured and diluted with normal saline in the proportion of about 1 in 300 to 1 in 600 parts, and sterilised at 60° C. Before sterilising these autoxins it is generally advisable to add 1 to 5 drops of caustic soda solution (15 per cent.); this breaks up the blood clot, and the pus cells. When the material is of a very tenacious consistency it is advisable to add the soda before the dilution, so that the caustic may act in a more concentrated form, and the mixture thus made may be left in the incubator for 18 to 24 hours; after this time the dilution and sterilisation can be proceeded with. To this autoxin, the streptococcus isolated from the original material may be added, and the autoxin-vaccine thus prepared. This preparation I have found much more efficacious in relieving the physical symptoms than ordinary vaccines. Thus in a former series of observations on cases of this disease treated by vaccines, only 4 out of 21 cases were relieved of their physical symptoms, while since the use of autoxin-vaccine method of treatment, out of a series of 17 cases only 2 failed to respond to the treatment, and both these were cases of very severe diabetes, the urine showing the presence of not only sugar, but also of acetone and diacetic acid in large amount.

In cases of mucous colitis most marked benefit was noticed by the use of autoxin injections.

The first case (No. 412 of my series) has been under surgical treatment for abdominal pains. The abdomen was opened thrice for one reason or other. However, the pains recurred after recovery, and large quantities of mucus either mixed with or free from fæcal matter were passed daily. Mucus free from fæcal matter was generally passed about half an hour after a boric enema, which the patient was in the habit of taking daily as a bowel wash. Such mucus was received in a sterile Petrie's plate, and autoxin prepared from it. The mucus was free from any fæcal contamination or odour, and this was diluted to the extent of 1 in 25. The first injection produced increased mucus, so the dilution was increased to 1 in 300. Five injections of this weaker autoxin were given at intervals of 15 days, and after that the patient's condition was much better and no more mucus was passed separately. At last—an injection of 1 in 25 dilution—was given, and the patient went away to her native country much relieved of all her symptoms, except those due to ventral hernia which had developed subsequently to the first operation.

An attempt to isolate a microbe from this mucus proved futile, as there were several organisms with the bacillus coli.

The second case (No. 468 of my series) was not so severe and not of long standing. The first case had a history of about 4 years' illness, while in this case the period was only 6 months. There was a history of chronic diarrhœa alternating with obstinate constipation. Olive oil and salol injections per rectum were tried, together with administration of the same oil per os. The diarrhœa and constipation were relieved hy this method, but at the end of 5 months' treatment the passage of mucus was just as bad as when the patient first came to me. As the mucus was partially mixed with fæcal matter, it was decided to try the autoxin prepared from the first case. In all five injections were given (1 in 25), the dose varying from 0.5 c.c. to 1.7 c.c., and the mucus stopped completely. Six months after the last injection the patient returned, saying that, on account of some indiscretion in diet he had an attack of diarrhœa, but the mucus had not reappeared even at that date, and a simple bismuth powder preceded by a dose of castor oil put him right. Observations with tuberculous pus and phthisical sputum, containing tubercle bacilli, are being carried on, but as these are not sufficiently advanced for forming a definite opinion about them I do not record them here. Recently a paper was published in the *Lancet* (August 24th, 1912) on the treatment of tubercular glands with an extract made of similar materials by Drs. Fraser and McGowan. As regards chronic bronchitis a paper was published recently by Dr. Gillett in the *British Medical Journal* (February 22nd, 1913). He uses the mixed culture from the expectoration for treatment of such cases. He also obtained good results. It seems, therefore, that the method described by me deserves to be given a trial wherever possible.

Table showing the Relative Value of Vaccine Injections as compared with Autoxin and Autoxin-Vaccines.

	Autoxin.		*Autoxin-vaccine.*		*Vaccine.*	
Total cases treated	101		29		135	
Cases improved	77	76·2 %	26	90%	92	68·15%
Cases not improved	24	23·76%	3	10%	43	31·85%

Table showing the Effects of Autoxin (1 in 100 dilution) in cases of Acute Pneumonia [six of the Autoxin cases are not counted in the First Table].

Nature of Treatment.	*No. Cases.*	*Deaths.*	*Deaths %*	*Remarks.*
Ordinary treatment	41	26	63.4	Twelve of these cases died within 24 hours after admission.
Vaccine (stock). .	10	8	80	Very severe cases.
Autoxin . .	7	—	—	Very severe cases; one of these had endocarditis subsequent to pneumonia.
Autoxin (stock).. .	4	4	100	Very severe cases; autoxin from one of the cured cases used.

OPERATING THEATRES.

HAMPSTEAD HOSPITAL.

Gynæcological Operations by Mr. Jackson Clarke.

The following series of cases were operated upon by Mr. Jackson Clarke:—

Case 1.—Ovarian Cyst.—R. C., æt. 26. Admitted May 29th, 1911; discharged July 10th, 1911. History of pain in right side of abdomen and offensive vaginal discharge. *Operation.*—May 31st; C.E.—ether. Uterine cavity curetted. Nothing abnormal removed. Pain continued after operation. *Second operation.*—June 14th; C.E.—ether. A cystic right ovary and the appendix, which was bound down by a few old adhesions, were removed. No drainage. Wound healed by first intention. Uneventful recovery.

Case 2.—Fleshy Mole.—M. L., æt. 30. Admitted December 20th, 1911; discharged December 30th, 1911. Three weeks' history of uterine hæmorrhage. Thought to be 4½ months pregnant. Cervix soft. Internal os tightly closed. Hæmorrhage slight. Temperature, 99°; pulse, 76. *Operation.*—December 21st; C.E.—ether. Dilatation and curetting. Two months fœtus extracted and partially organised placental tissue. Good deal of hæmorrhage. Uneventful recovery.

Case 3.—T. B. Mesenteric Glands.—A. P., æt. 40. Admitted October 18th, 1911; discharged December 16th, 1911. Twelve months before admission aching and throbbing pain in epigastrium, generally after meals. Vomiting. Jaundiced. No hæmatemesis or melæna. Similar attacks six weeks later, and since then at intervals of a month or fortnight. Rapid loss of weight for four months. Feet used to swell on standing. A thin, jaundiced woman. Marked tenderness in epigastrium, around umbilicus and down left side of abdomen. A mass palpable to right of umbilicus. Spleen and liver not palpable. Aorta displaced to the left; pulsation much more marked than normal. Stomach not dilated. Temperature, 98°; pulse, 96. Urine, nil. Per rectum, a hard, tender mass palpable about three inches from the anus on the right side; fairly mobile. Sir John Broadbent transferred to surgical side. *Operation.*—November 8th; C.E.—ether. Incision over appendix region. A number of caseous and calcifying tuberculous glands removed from mesentery. No drainage. Abdominal incision healed by first intention. Eleven days after operation temperature rose to 100.6°. Pain and swelling in region of saphenous opening, pain in popliteal space, and some œdema over tibia. (Thrombosis.) Temperature gradually came down and became normal at the expiration of a fortnight. Other symptoms disappeared. General condition of patient much improved on discharge.

Case 4.—Myomata Uteri.—A. S., æt. 38. Admitted January 3rd, 1911; discharged February 7th, 1911. Six months' history of heavy, bearing-down feeling during defæcation and on exertion, frequent desire to micturate and lassitude on exertion. Two fairly mobile tumours palpable. Each one reaches to a level with the umbilicus and extends literally halfway across the abdomen from the mid-line, one being on either side. Both attached posteriorly. No abdominal tenderness. *P.V.*—No tenderness. Both tumours continuous with uterus, which was retroverted. *Operation.*—January 11th; C.E.—ether. Abdominal hysterectomy for multiple fibro-myomata. Uninterrupted recovery.

Case 5.—Myomata Uteri—Appendicitis.—K. L., æt. 38. Admitted December 16th, 1911; discharged January 12th, 1912. Pain in lower part of abdomen and hæmorrhage from vagina—two days. Pain on micturition—seven days. Last menstrual period ended three weeks ago, having lasted fourteen days. Previously catamenia always regular, lasting 4—5 days. No history of vaginal discharge. Temperature 101.8°; pulse, 104. *Vaginal examination.*—Body of uterus enlarged and tender. Distinct mobile tumour in right fornix; outlines indefinite. Abdomen markedly tender on right side and somewhat rigid. *Operation.*—December 18th; $CHCl_3$—ether. Appendix removed and found to contain concretions. Pus soon flooded the pelvis from the right tube. Subperitoneal

---

(1) "A few Observations on Vaccine and Tuberculin Treatment in Bombay," N. F. Surveyor, *Journal of the Bombay Medical and Physical Society*, March 15th, 1911.

(2) "Some Observations on Malaria in relation to Splenic Enlargement and the Treatment of the Crescentic Stage," N. F. Surveyor, *Annals of Tropical Medicine and Parasitology*, vol. iv., No. 3, December, 1910.

uterine fibroids. Uterus (body) and right tube and ovary removed. One tube. Uneventful recovery.

Case 6.—Intestinal Obstruction.—T.H., male, æt. 9. Admitted December 8th, 1911; discharged January 10th, 1912. Admitted with a 12 hours' history of continuous vomiting of brown matter. Unable to keep any food down. Bowels open once. In Hampstead Hospital two months ago for appendix abscess and general peritonitis—treated by drainage (five tubes) and abdominal irrigation. On admission temperature 98.6°; pulse, 104; respiration, 40. Decreased abdominal movement with respiration. Some general tenderness and distension. Face drawn. Tongue coated. Breath foul. *Operation.*—December 9th; CHCl —ether. On opening abdomen, small bowel distended and whole of colon collapsed. Intestines bound down in many places by bands of adhesions, especially in the region of the ileo-cæcal valve. All adhesions excised. No drainage. Two days after operation developed a right basal pneumonia. His chest was in a condition of fibroid phthisis on admission. Wound healed by first intention.

Case 7.—Twisted Ovarian Cyst.—K.T., æt. 34. Admitted December 5th, 1911; discharged December 30th, 1911.—Sent in as a case of acute appendix.—3 days' history of pain in r. iliac fossa and vomiting. Bowels open. Six months pregnant. *On examination.*—Definite hard swelling in appendix region with some tenderness. Temperature 99.6°; pulse 100. Rectal examination.—Nil. Vaginal examination.—Softened pregnant cervix. Presenting fœtal parts felt. *Operation.*—December 6th; C.E.—ether. Incision over appendix region. A large dull bluish ovarian cyst, which was lying external to the ascending colon, presented, and was excised. The pedicle was twisted. Uneventful recovery.

Case 8.—Bilateral Ovarian Cyst..—M.E., æt. 70. Admitted November 4th, 1911; discharged November 28th, 1911. Two years' history of abdominal pain and swelling. Chronic and persistent diarrhœa. No vomiting. No wasting. Three weeks' acute history. Menopause 20 years ago. *On examination.*—Temperature 99.2°; pulse 116. Large abdominal tumour on right side occupying entirely right iliac fossa, umbilical and hypochondriac regions. Immobile. Flat on percussion. Slight fluid thrill. Vaginal examination.—Uterus retroverted. Cervix atrophied. Marked bulging in right fornix. *Operation.*—November 8th. 1911; C.E.—ether. Median incision. A large and almost black unilobular ovarian cyst, occupying nearly half the abdomen and with a twisted pedicle, was removed on the right side. Whole mass was almost gangrenous. A small ovarian cyst on the left side was removed. No signs of malignant disease on bowel wall. No drainage. Uneventful recovery.

Case 9.—Endometritis.—M.P., æt. 37. Admitted October 24th, 1911; discharged November 27, 1911. History of recurrent vaginal hæmorrhage. Last attack four days ago. Legs slightly swollen. Urine—nil. Menorrhagia has been constant. Uterus was curetted on September 13th, 1911; nothing definite found. Since the curettage has suffered a good deal of pain in lower part of abdomen. *Operation.*—October 28th; C.E.—ether. Uterus curetted Pathological report: "Hyperplastic and interstitial endometritis. No evidence of malignancy." *After-result.*—Temperature chart normal.

Case 10.—Fæcal Obstruction.—E.G., æt. 13. Admitted October 21st, 1911; discharged November 1st, 1911. In-patient 13 months ago for tuberculous peritonitis. No operation. Admitted for "frequent bilious vomiting." Twenty-four hours' history of umbilical pain, vomiting, and no action of bowels. Bowels open before onset of pain. Patient looks ill. Complexion earthy in colour. Tongue, thick brown coat. Breath very foul, odour almost fæcal. Abdomen slightly distended, only slight movement and rather rigid. No visible peristalsis. Pain and tenderness around umbilicus. No glands or abnormal masses palpable. Rectum full of fæces. Good result from soap-and-water enema, which completely relieved pain three hours later. No operation. *Result.*—Cured.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

AUSTRIA.

Vienna, Sept. 13th. 1913.

Inequality of the Pupils in Visceral Disease.

Dr. Anton Bukolt has just published his observations on an interesting clinical sign which has hitherto attracted comparatively little general notice: inequality of the pupils in cases of unilateral pulmonary disease. The occurrence of such inequality, although by no means consistent, and in some instances of its appearance quite transitory, is so far frequent as to give it a more decided claim to clinical attention than it has generally received, while its presence unquestionably suggests associations of great interest in the borderland which connects and separates physiology and pathology. In a series of 35 cases of uncomplicated unilateral pneumonia without any considerable involvement of the pleura, inequality of the pupils was present in 23—or in 65.7 per cent. of those in which it was specially looked for. The inequality presented consisted in 14 of the cases of mydriasis and in 9 of myosis on the side of the pulmonary affection. In 17 of the cases, the lower lobe of the left lung was affected; in 10 of these there was mydriasis on the same side as the pulmonary lesion; in two there was myosis; in the remaining five the pupils showed no difference. In a single case, in which the whole of the left lung was involved, there was observed a transitory mydriasis which lasted but a short time. In 9 cases of pneumonia of the right lower lobe, there was marked myosis on the same side in three; slight myosis on the affected side in a corresponding number; while the remaining three presented no difference in the size of the pupils. Of two cases of pneumonia of the right upper lobe, one presented mydriasis on the affected side; in the other the pupils were equal throughout. In a case of right-side pneumonia, which affected the upper and middle lobes, there was mydriasis on the affected side. In a case of right-side inflammation of the middle lobe there was no difference of pupils observable.

Careful research in the literature revealed scattered records of such varying pupillary differences in the course of pulmonary lesions; also in other thoracic and abdominal lesions, and even in some of the systemic fevers, and in general constitution cachexiæ. So far back as 1872 it was pointed out by Roque that a difference in the dimensions of the pupils was sometimes observable in unilateral lesions of various parts of the body, especially in unilateral pulmonary affections, acute and chronic, and in lesions of the bronchial and cervical lymphatic glands. The observations of Pasternatzky led him to the conclusion, in 1886, that inequality of the pupils occurred much more frequently in cases of visceral disease than was generally believed. This observer's researches led him to the conclusion that there existed even a proportion of incidence which approximated the constancy, although it seemed very unlikely that it could even attain it. Thus, a pupillary difference was observable in 85 per cent. of cases of pneumonia crouposa, in 61 per cent. of cases of aneurysm and cardiac debility; while it also ocurred with less frequency and regularity of proportion in cases of pleuritis, chronic catarrhal pneumonia, colica hepatica, colica renalis, etc. A difference of pupillary dimensions was also not infrequent in typhus, scorbutus, and other constitutional diseases, especially when visceral complications were present. Pasternatzky's own observations showed him that in croupous pneumonia there was at first a widening of the pupil of the affected side, to be followed by subsequent narrowing (in the third stage). On the other hand, the irregularity of the pupils which occurs in cases of cardiac debility, aortic aneurysm, etc., remains a constant and unchanging condition. Pasternatzky regarded all such cases of irregularity of pupils, unaccompanied by any other ocular manifestation, as a neural phenomenon produced by reflexion of the path of the peripheral stimulus on to the sympathetic system.

Fleischmann in 1876 recorded his observations of symptoms accurring in infants during the period of dentition, which could be explained only by reflex stimulation of the sympathetic: flushing or pallor of one side of the face and head; formation of localised and transitory patches of erythema on cheek or neck on one side; also intermittent neurosis of the sympathetic affecting the whole of one lateral half of the body: accompanied by redness and elevation of temperature all over the affected side; with redness and elevation of temperature of the ear of the same side—such as follows unilateral section of the sympathetic nerve-trunk. Seeligmüller, in 1877, described four cases of pulmonary lesion, each of which was accompanied by pupillary signs. His observations led him to believe that not only apicial pneumonia and pleuritis, but deep-seated pleuro-pneumonia, are sometimes productive of manifestations of engagement of the sympathetic. Rampoldi, in 1885, published two cases, of acute and chronic inflammation respectively of the apex of one lung in one of the cases, of both apices in the other. There was marked mydriasis, which he explained by reflex stimulation of the sympathetic, transmitted centrally by the pneumogastric, without excluding a possible genesis by direct pressure on the former. The same observer published in 1890 the case of a woman who had a tuberculous cavity in the right lung and a myotic pupil on the same side. The autopsy showed that a thickened pleura compressed the lower cervical ganglion of the sympathetic, which also displayed copious leucocytic infiltration. Destrée, in 1894 (International Medical Congress, Rome), stated that in 97 per cent. of all cases of pulmonary tuberculosis inequality of the pupils was present—dilatation of the pupil of the affected side. It was variable in amount, sometimes disappeared and returned, and was attributed by him to pressure of tuberculous bronchial glands of the sympathetic nerve-chain. Soupues published, in 1902, observations of three cases in which myosis, narrowing of palpebral fissure, and retraction of the eye-ball co-existed with tuberculosis of the apex of the lung. He attributed the phenomena to lesion of the dilator fibres of the sympathetic, which travel with the rami communicantes of the first dorsal nerve, and are consequently in close contact with the dome of the pleura. Widal treated a case in which hydatid cyst of the right lung co-existed with myosis of the same side in a man, aged 43. The myosis disappeared after operative treatment of the hydatid cyst. Other more recent writers on the subject have collected comprehensive statistics, which would go to show that such pupillary alterations are proportionately less frequent. Still, there is sufficient evidence to prove that they are often present, and the subject is one which must surely interest every attentive clinician.

HUNGARY.

Budapest, Sept. 13th, 1913.

THE TREATMENT OF ASTHMA.

ACCORDING to Dr. Prill the treatment of asthma must consist of hygienic, dietetic and medicinal medication. The hygiene includes life in the open air, with avoidance of climates of high altitudes, or where the winds are strong, where the barometric or thermometric variations are extreme. Humidity is bad for asthmatics. The wearing of woollen under-garments, moderate exercise, hydrotherapy, massage and alcoholic rubbings, followed by dry friction, are recommended. As regards diet, moderation, particularly at the evening meal (at which meats should be excluded) must be observed. He forbids game, pork, preserves, cheese, tomatoes, and asparagus especially. Tobacco and alcohol, he insists, are better avoided, and coffee should be drunk only in moderation. The medicinal treatment is indispensable. The use of iodide of potash is essential, and is to be given in daily doses of ½ to 1 gramme per day. Prill recommends the following formula:—

℞. Kalii iodati, 5.00.
Aq. dist., 150,00.
Antipyrini, 1.00.
Glycerini, 70.00.

N.D.S. Three tablespoonfuls daily, after meals.

Arsenical medication is also of value. The sodium arsenate, in the form of Fowler's solution, may be given to children over two years old in daily doses of 0.0002 for each year of age, and to the adult half a centigram. Dr. Terrai has recommended the following prescription:—

Acid. arsenicosi, centigrammes, .25.
Mucil. gumm. arab. } aa. q.s.
Aq. destill.
Ut fiant pilulæ No. 100.

D.S. Thrice daily one pill; to be taken after meals. To be used for months with intervals of 10–12 days.

Trousseau has recommended the following prescription:—

℞. Extr. belladonnæ } aa. centigramma
Pulv. radic. belladon. } unum, 0.01.
F. cum talibus dosibus pilulæ.

S. Give one daily and increase every other day with one pill.

The tincture of belladonna may be used, two drops for each year of age, in the child. Von Noorden uses the sulphate of atropine, 0.0001 grn. daily (one-tenth of a milligram), to be increased gradually until the daily dose is four-tenths of a milligram. The association of the various agents mentioned above may be used as follows: (*a*) for ten days in the month belladonna in its various forms may be administered; (*b*) for the rest of the month should be employed the following:—

Decocti rad. senegæ (3 : 100), 100.00.
Aq. dest., 100.00.
Tinct. lobeliæ, 5–10.00.
Arenicosi natrii, 0.004-0.10.
Kalii iodati, 1 to 5.00.
Kalii bromati, 1 to 10.00.
Cocaini hydrochlorici, 0.20.

M.D.S. One tablespoonful twice daily.

During this time, the patient should smoke, every other day, one of the Zematone, Niemayer or Wirth cigarettes, or one made as follows:—

℞. Folia bellad., 0.30.
Folio, hyoscyami,
Folia daturæ, aa. 0.75
Folia phellandii, 0.05.

Macerate in a mixture of
Gummy extr. opii, 0.015.
Cherry-laurel water, q.s.

Dry, cut fine, and make cigarettes with paper impregnated with the same liquid.

Electro-therapy has given excellent results. Every eight days the patient should get a pill containing 0.10 gm. aloes. During the attacks the windows should be opened, avoiding possible chilling; sinapisms should be applied to the feet; a little of the following ointment should be inserted into the nostrils:—

℞. Cocaine, 0.05.
Mentholi, 0.10.
Vaselin, 10.00.

The patient should inhale 5 to 15 drops of pyridine on a handkerchief, and smoke a Despic cigarette. He may inhale the vapour of water containing carbolic acid. Morphine (0.01) may be injected. If the heart is feeble, administer caffeine, or digalen. If asthma is a symptom of various morbid conditions, as bronchitis, emphysema, heart and renal disease, these should receive attention.

DR. SAMSON GEMMELL, of 17, Woodside Place, Glasgow, Professor of Medicine at the University of Glasgow, who died on April 2nd, aged 64, left, in addition to considerable real estate, personal estate valued at £106,546, of which £63,000 consisted of cash at the bank.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

GLASGOW.

Glasgow Sanatoria.

The Public Health Committee recommend the purchase of Bellefield Sanatorium by the Corporation, which sanatorium has, for nearly ten years, been conducted by the Glasgow and District Branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis. This step has been rendered necessary since the notification of tuberculosis, and the obligation to provide accommodation for patients suffering from such ailment being laid upon local authorities. Before the passing of the Act, persons suffering from tuberculosis were largely provided for by voluntary associations or by parish councils.

Bellefield Sanatorium is situated in Lanark, and is a substantial building, equipped on the most scientific lines. It has accommodation for fifty-two patients, and the grounds, which extend to about twenty-three acres, are unburdened. If the transfer is ratified it will make the second purchase by the Corporation for the treatment of tuberculosis; the Estate of Southfield having been purchased some time ago.

Sanitary Congress.

The thirty-ninth annual conference of the Incorporated Sanitary Association of Scotland was held in Glasgow on the 11th September and following days. At the annual general meeting held the evening previous (Wednesday, September 10th), Dr. Thomas W. Drinkwater, of Edinburgh, delivered a lecture in the Berkeley Hall on

Food and its Preparation,

illustrated by lantern views. Dr. Drinkwater, during the course of his lecture, remarked that our fault, or one of them, as a nation, was that our cookery methods were bad and wasteful, and that a French peasant woman could, with the aid of a little meat and a larger proportion of vegetables, make a tasty dish for her husband and family at a cost which would astonish the inhabitants of any of our towns, and this notwithstanding that her cooking apparatus had nothing in common with our kitchen ranges, and usually consisted of an earthenware pipkin, a handful of charcoal for fuel, and a stove. For this state of matters our cookery books were to some extent responsible, for they were the most unscientific instruction books that the lecturer knew. A little knowledge on the part of our housewives would alter this, and we should remember that to be scientific was to be methodical. He (the lecturer), did not think that many of our temperance reformers realised that bad cooking was the cause of a great deal of drunkenness. He did not wish to decry the higher education of women, and believed there were many women as capable of higher education as men, but there were many more who were qualified for a higher calling as that of motherhood and the management of a home, and he thought they would agree with him that a sound knowledge of cookery and household management was far more likely to render a home happy than a knowledge of classics. As perfect a food as could be obtained was a combination of milk and oatmeal, but this nutritious and wholesome dish was going out of fashion in Scotland. We often hear that the unhealthy condition of the poorer children in our towns was due to adulterated milk, or to milk from tuberculous cows, but on making an inquiry amongst the milk dealers in Edinburgh, especially amongst those serving the poorest localities, it was found that they sold more skim milk than sweet, because it was cheaper, and thus the children fed on such milk suffered from a want of fat, a condition which was very much intensified by the "jelly piece" in addition. Butter was too expensive, and they had a prejudice against margarine which was wholly unfounded. The health of these children would be immensely improved if margarine, or dripping, were given to them instead of jelly or jam. He thought that many people who maintain that they cannot take porridge were the subjects of fancy, for if porridge was well boiled it ought to be more digestible than bread. The general method of cooking meat exposed it at too great a temperature to ensure the best condition of the albumen. The ordinary method of cooking an egg was to boil it for three minutes (three and a half minutes if a fresh country one), with the result that the white part was hard and overcooked, the yolk being undercooked, as the yolk of the egg coagulated at a lower temperature than the white. If they boiled a pint of water and then put the egg in and drew the pan aside, allowing it to remain for twenty minutes, the egg would be found to be properly cooked, the white and the yolk equally, and neither hardened nor rendered indigestible. An advantage was to cover the pan with a modified tea-pot cosy.

He recommended the double vessel method of cooking, and remarked that steaming was a method much neglected, and said that frying had been described as the lazy housewife's companion, and believed it deserved the name. He would like to see the frying-pan take its place as an obsolete piece of cooking apparatus, to be tied up with ribbon and hung on the walls as an ornament, along with other strange things. If they wished to fry, a frying kettle should be used, and good frying oil, and the meat to be plunged bodily beneath the heated oil, as by the coagulation of the surface albumen it was sealed, and after cooking the extraneous fat was to be drained away.

Dr. William Robertson, Medical Officer of Health, Leith, in his presidential address at the Sanitary Congress dealing with

The Tuberculosis Problem,

said that tuberculosis must now be calmly recognised as a social sore demanding the application of many healing agencies at the hands of far-seeing and determined reformers, and their leading aim must be directed not so much to the cure of the ailment as to its prevention. Neither notification, elaborately equipped sanatoria, dispensaries, nor disinfection would attain the object they had in view, but rather the social elevation of the citizens of our country that would bring us within measurable distance of ultimate victory. It was true to say that the city dweller was less liable to attack from pulmonary tuberculosis than his neighbour of the country district, and although such a statement would cause dismay, yet facts and figures were at hand to prove it. In the urban districts of Scotland the reduction in the tuberculous death-rate had been greater for both sexes than in the rural districts, and the maximum death-rate amongst males in the country districts had been at an earlier age than amongst the town dwellers. Referring to the rural inhabitant and searching for a reason which caused this heavier incidence from tuberculosis, it was found that on a green hill-side fresh air was there in abundance, there was no fog to screen the health-giving rays of the sun, and on searching round it was realised that all the elements were at hand to defy such a disease as tuberculosis; but on stepping from the roadway and examining the house it was probably found that the roof was thatched and the ceiling low, the tiny windows, when the house was built, were never intended to open, and on the deeply recessed window ledge were packed together several pots in which grew some hardy plants, which effectually barred the entrance of sunshine, but which flourished at the expense of what light could reach them. On entering the house through the low doorway they were met with the odour of organically polluted air, and the floor gave under their feet as they approached the fireplace, where burned a fire, the embers of which had never been black for years.

It was in such a place as this—and there were hundreds upon hundreds of them in Scotland still in existence—that people were expected to lead healthy lives, and to rear boys and girls into healthy manhood and womanhood. It simply could not be done. Fresh air and sunshine were the watchword of the health official, and every house should be well lighted and ventilated. He was aware that many people would continue to live under deplorably bad hygienic conditions even when good, clean houses were provided for them, and the task of the health official must often begin and end with these irresponsible and lapsed persons. Dr. Robertson paid a high tribute to the work of the lady health visitor. The health official was greatly concerned by his knowledge that the section of the population which furnished the heaviest incidence from tuberculosis supplied itself with food badly chosen, badly cooked, and of inferior nutritive value. Poor wages were not always at fault here, as money was available for amusement, and even betting. Valuable body-building foodstuffs were either ignored or unknown, and the mere mention of rice, beans or lentils to the poorer classes was treated with insignificant scorn and disgust; porridge was seldom used, because the housewife was too lazy to make it. Milk was too expensive and milk puddings unpopular. Yet it was upon "put off" meals, to give them their deserved name, that our principal wage-earners were expected to thrive and remain in good health.

No wonder we had so much tuberculosis, especially when bad environment was accompanied by lack of nourishment, and it was a deplorable fact that many of the workers amongst the labouring class spent at least one-sixth of his weekly wages upon alcoholic beverages, and he was sorry to say that it was the inhabitant of the one-and-two-roomed house who provided some very sorry examples of excessive alcoholic indulgence, and although he did not aspire to solve the drink problem he was certain that when the suggestions for securing better houses, better feeding methods, and less abuse of alcohol were placed before them in a workable form, they would be depended upon to demand a considerable amount of success.

Dr. W. F. Brown, Medical Officer of Health, Ayr, said, in discussing the "Powers of Inspection as Foreshadowed in the Prospective Milk Legislation, 1913," that it was absolutely necessary for the appointment of a bacteriologist if they were to make any progress in milk inspection. He thought the American methods were almost ideal, and that our recent legislation was just copying these methods.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

FRENCH SANITATION AND ENGLISH CRITICS.

To the Editor of The Medical Press and Circular.

Sir,—It is well that someone should undertake the thankless task of pointing out the defectiveness of French drainage and house sanitation generally. Any English traveller who has gone off the track usually affected by his countrymen will realise the truth of the picture so graphically presented in your columns a week or two ago. As a medical man with a fair experience of public health work, I have a fairly cultivated olfactory sense for the detection of sewer gas. I may say that the odour is rarely absent from hotels in France or from the dwelling houses I have visited. It is, of course, unsafe to draw conclusions from a limited number of observations taken under particular conditions. Nevertheless one may to some extent infer that the defective standards of the hotels are more or less prevalent in the homes of private citizens. Englishmen are in some ways a curiously tolerant race, otherwise the deplorably bad sanitary state of the average French hotel would have put a stop to the constant flow of tourists and visitors across the Channel.

But can we as a nation afford to throw stones at France? I admit that our hotels and our private dwelling houses as a general rule are well equipped and well maintained from a sanitary point of view. But what of our railways? I could give plenty of instances in which the closets in railway stations are grossly and scandalously defective. Why should not the Medical Officer of Health assert his powers over our railway stations? Is there any legal obstacle in his way? Then, again, the closets in the corridor trains are often filthy and ill-supplied with water. Whose duty is it to inspect and enforce a proper care of water closets in a railway train? Then, again, some excursion trains are run for long journeys without corridors and without sanitary conveniences for passengers. Such a state of things should be impossible in this present year of grace. Nor is the evil lessened by the fact that the train often does not stop at intermediate stations at all, or, should it do so, it remains too short a time for the passengers to obtain the necessary relief in the station lavatory.

These matters are of much importance to the travelling public. I trust, Sir, you will thresh the matter out in your valuable journal, among the readers of which must be many able to furnish valuable observations as to facts and suggestions as to remedying sanitation.

I am, Sir, yours truly,
September 11th, 1913. Anglo-Indian.

MEDICAL MEN UNDER THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Sir,—Your editorial comments in the "Educational number" about the betterment of the medical profession through the Insurance Act suggests this query, and I trust you will not think it a liberty if I ask you to publish it.

Which is the worse, and what is the difference between seeing patients at an open surgery at a cheap rate, and seeing the same or better class under the Insurance Act for the same remuneration, or less?

The answer, I take it, would be that under the Act the doctor is a contract slave, and in the other case a free man and therefore better off. Oh, for a good trades union! As I am on the panel, I depart from my usual practice of signing my name and subscribe myself,

Yours truly,
London, S.W. An Old Radical.
September 13th, 1913.

P.S.—My panel returns less than surgery rates.

OBITUARY.

DR. FRANK BUSZARD, OF NORTHAMPTON.

The death is announced of Dr. Frank Buszard, of Dallington, near Northampton, at the age of 74. The deceased was the younger son of Dr. Marston Buszard, M.D., of Lutterworth, the younger brother of Mr. Marston Buszard, K.C., Recorder of Leicester. He qualified as M.R.C.S.Eng. in 1860, becoming F.R.C.S. in 1864, M.D Lond. in 1865. He was elected F.R.C.P.Lond. in 1887. For over 60 years he was connected with Northampton Hospital, being the Senior Honorary Physician for nearly half a century. In recognition of his services he was presented in March, 1912, with his portrait in oils. In making the presentation, the late Lord Northampton described him as "an ornament to a noble profession," and added, "He has devoted over half a century as Honorary Physician without any thought of return." In reply Dr. Buszard said that when he first went to Northampton he was the only house surgeon at the hospital, although there were over 150 beds and nearly 6,000 out-patients. Hospitals were then emerging from the "Sairey Gamp" stage. The night nurses were simply charwomen, who worked hard during the day and added to their income by sitting up at night, generally asleep in armchairs. Dr. Buszard was one of the pioneers of hospital reform, which he advocated at medical congresses throughout the country. He was instrumental in effecting great improvements at Northampton, which came to be regarded as a model institution. He was the leader of the Unionist Party at Northampton for many years. He was also a magistrate for the borough of Northampton. He leaves a widow, two daughters and one son to mourn his loss.

DR. C. K. MORRIS, OF BLACKHEATH.

We regret to record the death of Dr. Clarke Kelly Morris, J.P., which took place suddenly from heart failure at his residence, Gordon Lodge, Blackheath, on the 31st ult., aged 58. The deceased was the son of Dr. Edwin Morris, who was in practice in Spalding, Lincolnshire. He came to Blackheath in July, 1880, entering into partnership with Dr. Peter Cooper, of Stainton Lodge, Shooter's Hill Road, Blackheath, they subsequently being associated with Dr. Finch White and Dr. Lionel Hooper, of Westcombe Hill. Dr. Clarke Morris, who studied at St. Thomas's Hospital, was admitted M.R.C.S.Eng. and L.S.A.Lond. in 1877. He was Hon. Consulting Surgeon to the Blackheath and Charlton Hospital, Hon. Local Secretary and Treasurer of Epsom College, and Fellow of the Obstetric Society. Formerly he was Surgeon to the Johnston Hospital at Spalding and to the Royal Kent Dispensary (now amalgamated with the Miller General Hospital in Greenwich Road), Medical Officer of Health for the Spalding Urban District Council, and Resident Clinical Assistant at the City of London Hospital for Diseases of the Chest. Dr. Morris was appointed on the Commission of the Peace for the County of London about twelve years ago, and by his colleagues of the Blackheath Bench he was highly esteemed; his level-headed reasoning was an asset of great value in their deliberations.

MEDICAL NEWS IN BRIEF.

The Cost of London Hospitals.

The statistical report on the ordinary expenditure of 109 London hospitals for 1912 has been submitted by the Honorary Secretaries of King Edward's Hospital Fund to the Duke of Teck, Lord Iveagh, and the Speaker, governors of the fund. There were 9,233 beds in average daily occupation in the London hospitals during 1912. The total number of in-patients admitted during that year was 134,647, while 1,529,197 patients attended at the out-patient departments. The total ordinary expenditure during the year at these hospitals, including maintenance, administration, rent, rates, and taxes, but excluding expenditure on improvements and additions or other capital expenditure, and also before charging interest on borrowed money, amounted to £1,038,791. The total income of these hospitals from all sources, including the legacies received during the year, would not, by a large amount, have sufficed to meet the annual working expenditure (apart from the cost of improvements and additions or other capital expenditure) but for the grants made by this fund and the Metropolitan Hospital Sunday and Hospital Saturday Funds. They regret to see that the increase in the cost per bed occupied and per attendance of out-patients, first noted in 1911, has continued, the addition in 1912 representing about £21,800.

Daring Robbery at the House of a London Medical Man.

Harry Mansfield, aged 21, of Wyndham Street, Marylebone Road, was sentenced last week by Mr. Paul Taylor, at Marylebone, to six weeks' hard labour for stealing £4 cash, a gold watch, gold albert, gold matchbox, gold cigar piercer, and a sovereign purse, together representing between £65 and £70, the property of Mr. James Sherren, Devonshire Place, W. A detective said that he called at a pawnbroker's in East Street, Marylebone, on business, and there saw Mansfield trying to pawn some jewellery. The articles were returned to the accused by the pawnbrokr, and when Mansfield left the shop the detective followed him and asked him where he obtained the property. Mansfield said that it belonged to him, but the detective told him that the articles corresponded with property reported to have been stolen from Mr. Sherren's house, and he should arrest him. At the police-station Mansfield said that he was passing Mr. Sherren's house, and seeing the area gate and door open he seized the opportunity and entered the house. There was nobody in the kitchen, so he went upstairs and went into nearly every room in the house and helped himself to what he could find. When he heard someone coming he secreted himself in a cupboard. On leaving his hiding place he dropped a new screwdriver and left it behind him, regarding that as a good exchange for the booty he had secured. He then left the house by the front door. Mr. Sherren said that the property was taken from his dressing room. The children and servants were away, and he was at dinner in the dining room.

The Marienbad Cholera Case.

It is reported that the persons in the Isolation Hospital at Marienbad who had come into contact with the lady who recently arrived there from Bosnia suffering from cholera were at the expiration of their period of isolation on Monday last pronounced to be perfectly well, and it is announced that there is now no danger of the disease being spread through their medium. Frau Garcinstsa, the cholera patient in question, is making good progress towards recovery.

Plague in East Africa.

It is announced from Zanzibar that an epidemic of plague and cerebro-spinal meningitis which has recently broken out in East Africa now extends from the coast to Victoria Nyanza, Mombasa, Nairobi, and Kisumu are affected. The total number of cases is 452; the deaths are 328.

The Royal Institute of Public Health.

A course of instruction for candidates as Tuberculosis Officers, General Practitioners and others, will be opened on Oct. 10th with an introductory address by Prof. G. Sims Woodhead, M.D., LL.D., F.R.S.Edin., followed by a series of eleven weekly lectures by well-known authorities—viz., Dr. Charles Porter, Dr. A. Conyers Inman, Dr. J. Edward Squire, Dr. T. N. Kelynack, Mr. Henry J. Gauvain, Dr. Cecil Wall, Dr. Clive Riviere, Dr. Halliday Sutherland, Dr. Thomas D. Lister, Dr. Alfred Greenwood and Dr. H. Owen West. Bacteriological demonstrations will be given in the laboratories of the Institute (Russell Square, London), and visits arranged to Sanatoria, tuberculosis dispensaries, etc. Fee for the course, three guineas. The lectures will be delivered in the Lecture Room of the Institute on Fridays at 5 p.m. All interested are invited to attend at introductory lecture.

Sanatoria at Farnham.

At a meeting of the managers of the Farnham (Surrey) Isolation Hospital last week it was reported that the Urban Council for the neighbouring district of Aldershot had offered the Hampshire County Council six acres of land owned by them at Hale, which is in the rural district of Farnham, for the purposes of a sanatorium, and that the offer was being considered by the Hampshire Insurance Committee, and also by the Public Health Committee of the county. There are already a number of such institutions in the Farnham district, and the opinion was expressed that the introduction of another would be disastrous to the welfare of the locality.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

A Correction.—The annual dinner of past and present students of St. Mary's Hospital Medical School will be held at Princes' Restaurant at 7 p.m. on Thursday, October 2nd, not on October 7th, as previously announced. Mr. Horace Sworder will preside, and the Hon. Secretary is Mr. Y. Warren Low, 146 Harley Street, W.

A. R. M. (Cornwall).—It is a well-known fact that insanity is closely allied to genius. The following celebrities have been declared to be either epileptic, insane, or born of a neuropathic stock:—Alexander the Great, Julius Cæsar, Napoleon, Peter the Great, Frederick the Great, Pitt, Earl of Chatham, Mahomet, the Apostle Paul, Martin Luther, Emmanuel Swedenborg, and others. Among English poets, Cowper, Wordsworth, Byron, Gray, Burns, Chatterton, Thompson were either insane or possessed the neuropathic temperament.

Mr. V. Palmer (Russell Square, W.C.).—Our correspondent would do well to consult *The Ship Surgeon's Handbook*, by A. V. Elder, M.R.C.S., L.R.C.P., second edition. (London: Bailliere, Tindall, and Cox, 1911, price 5s.)

Dr. S. T. (London, N.).—One of the best night commodes we have come across is the Portable Sanitary Water Closet, patented by Mr. Tom Jones, of Parkdale, Sedgley, near Dudley, which is self-contained, thoroughly sanitary, not unsightly, and reasonable in price.

F.R.C.S.Edin. (N. Wales).—Quinine amblyopia differs from that due to tobacco in that in the former the rods are poisoned, whereas in the latter the function of the cones is destroyed. As a rule the prognosis is worse in the former than in the latter.

Appointments.

Davies, Trevor Berwyn, M.D., B.S.Lond., B.Sc., M.R.C.P.Lond., Registrar and Pathologist to the Hospital for Women, Soho Square, London.

Dickson, William Arnott, M.D., Ch.B.St.And., F.R.C.S.Edin., D.P.H., Tuberculosis Officer for Gloucestershire.

Dykes, Andrew Leslie, M.D.Edin., D.P.H.Lond., Assistant Medical Officer of Health of the County Borough of Oldham.

Henderson, John, M.D., Ch.B.Glasg., F.R.F.P.S.Glasg., Visiting Physician to the Glasgow Royal Infirmary.

Vacancies.

Carlisle Non-Provident Dispensary.—Resident Medical Officer. Salary £200 per annum, with apartments. Applications to the Hon. Secretary, Mr. G. A. Lightfoot, 23 Castle Street, Carlisle.

Royal Sea Bathing Hospital for Surgical Tuberculosis, Margate.—Resident Surgeon. Salary £120 per annum, with board, residence, and laundry. Applications to the Secretary, R.S.B.H. Offices, 13 Charing Cross, London, S.W.

Swansea General and Eye Hospital.—House Surgeon. Salary £100 per annum, with board, washing, and attendance. Applications to W. D. Hughes, Secretary.

St. Mary's Hospital for Women and Children, Plaistow, London, E.—Senior Resident Medical Officer. Salary £100 per annum, with residence, board, and laundry. Applications to the Secretary.

Canterbury Mental Hospital, Canterbury.—Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Wrexham Infirmary.—Resident House Surgeon. Salary £120 per annum, with board, lodging, and washing. Applications to the Secretary, 7 Hill Street, Wrexham.

Birmingham City Asylum, Rubery Hill, Birmingham.—Junior Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, laundry, etc. Applications to the Medical Superintendent.

Stockport Infirmary.—Junior House Surgeon. Salary £100 per annum, with board, washing, and residence. Applications to the Secretary.

Rochdale Infirmary.—Second House Surgeon. Salary £100 per annum, with board, residence, and laundry. . Applications to T. Elvyn Kershaw, Secretary.

Somerset and Bath Asylum, Cotford, Taunton.—Assistant Medical Officer. Salary £180 per annum, with furnished apartments, board, fuel, lighting, washing, and attendance. Applications to the Medical Superintendent.

The Royal Infirmary, Hull.—House Physician. Salary £100 per annum, with board and furnished apartments. Applications to the Chairman of the House Committee.

The Royal Infirmary, Hull.—Assistant House Surgeon. Salary £100 per annum, with board and lodging. Applications to the Chairman, House Committee.

Births.

Clarke.—On September 13th, at Bank House, Morley, to Dr. and Mrs. Fraser Clarke—a daughter.

Gallie.—On September 11th, at the Guards' Depot, Caterham, Surrey, the wife of Major Stuart Gallie, R.A.M.C., of a daughter.

Hardie.—On September 14th, at 15 Wood Street, Barnet, the wife of Charles F. Hardie, M.A., M.B., of a son.

May.—On September 9th, at Sowton, Gerrard's Cross, the wife of Walter J. May (*née* Madge Litteljohn), of 24 Upper Wimpole Street, W., of a son.

Ogle-Skan.—On September 7th, at 157 Audley Road, Hendon, N.W., the wife of H. W. Ogle-Skan, M.R.C.S., L.R.C.P., of a son.

Penrose.—On September 10th, at 32 West Bar, Banbury, to Dr. and Mrs. N. C. Penrose—a daughter.

Walton.—On September 11th, at 1 Weymouth Street, Portland Place, W., the wife of Albert J. Walton, M.S., F.R.C.S., of a son.

Marriages.

Adeney—Adeney.—On September 9th, George Cuthbert Adeney, M.R.C.S., of Tunbridge Wells, son of Rev. Walter F. Adeney, D.D., late of Manchester, to Hilda Caroline, daughter of E. S. Adeney, of Edgmond, Gerrard's Cross.

Barker—Morrison.—On September 4th, at St. Margaret's Church, Northam, Robert Sidney Barker, M.B., B.S., of Greenwich, son of the late Robert Barker, of Whitehaven, to Frances Muriel, daughter of the late William Henry Brown Morrison, of Wakefield, and Mrs. Morrison, of Allerton, Weybridge.

Deaths.

Bate.—On September 11th, at 2 King Edward Road, South Hackney, N.E., Elizabeth, wife of George P. Bate, M.D., in her 73rd year.

Buszard.—On September 14th, at Dallington, Northampton, Frank Buszard, J.P., M.D.Lond., F.R.C.S.Lond., F.R.C.S.Eng., for many years Senior Physician to the Northampton Hospital, younger son of the late Marston Buszard, M.D.Edin., of Lutterworth, aged 74.

Lathbury.—On September 11th, at 4 Burlington Place, Eastbourne, Florence Jane, the beloved wife of Arthur Edward Lathbury, M.R.C.S., L.R.C.P., of Eastbourne.

Nix.—On September 11th, after a short illness, Edward James Nix, M.D., of 11 Weymouth Street, W., aged 69.

Pauli.—On September 2nd, at "Sandringham," Locking Road, Weston-super-Mare, George William Pauli, L.R.C.P. and S.Edin., L.F.P.S.Glasg., aged 45.

Richardson.—On September 3rd, at 71 Upper Richmond Road, S.W., John Howard Humphrey Richardson, M.R.C.S.Eng., L.S.A.Lond.

Tennent.—On September 13th, at 159, Bath Street, Glasgow, Gavin Paterson Tennent, M.D.

OPERATIONS—METROPOLITAN HOSPITALS.

WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m.), London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopædic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9 30 a.m. and 2.30 p.m.), Gt Ormond Street, (9.30 a.m.), Gt. Northern Central (2.30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College (2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynæcological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopædic (2.30 p.m.), Soho Square (2 p.m.).

SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.) Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. George's (2 p.m.), St. Mary's (2.35 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), Chelsea (2 p.m.) Samaritan (Gynæcological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopædic (2 p.m.), City Orthopædic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).

TUESDAY.—London (2 p.m.), St. Bartholomew's (1 30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Ear (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m., Throat, Golden Square (93.0 a.m.), Soho Square (2 p.m.).

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, SEPTEMBER 24, 1913. No. 13.

NOTES AND COMMENTS.

A "Black" Doctor.

A CURIOUS sidelight was thrown upon our national prejudices against coloured folk by a recent incident at Camberwell. It appears that the local guardians had advertised a vacancy for a district medical officership and there were two applicants for the post. On the day of appointment the name of one only, an Englishman, was brought before the meeting. A member pointed out that under the circumstances it was not possible to make a selection, and it was then gently intimated to him that it had not been thought advisable to bring the second applicant before the Board on the ground that he was a "black" man. Thereupon followed a discussion on lines not altogether unfamiliar. One of the members protested warmly against the exclusion of a candidate on account of the colour of his skin. That attitude he condemned as contrary to what we are taught about proper feeling towards our brothers. He was opposed by a medical man, who remarked that the duty of the medical officer was to attend the poor, who were fastidious enough to refuse attendance by a man of colour. The upshot of the matter was that the exclusion was supported by fifteen votes to eight.

Other Cases.

IN support of his argument the medical member cited the case of a coloured midwife from the West Indies who settled in the district, but whom none would employ. His further evidence, however, cut both ways, for he stated that the coloured applicant, if appointed, would not give up an appointment in Marylebone. The nature of the latter post was not mentioned, but it is evident that the prejudices of Camberwell are not altogether endorsed in Marylebone. This question of colour, in point of fact, is constantly cropping up in various parts of the Kingdom. The present writer recalls the throwing out of an application some years since for a junior house surgeoncy in a London hospital, and the appointment of an unsuitable man. The plain fact of the matter is that any man of colour who elects to practice medicine in the United Kingdom must be prepared to face an enormous amount of opposition. It has been shown again and again that it is possible to gain a living under such circumstances, and in some cases to attain considerable and even brilliant success. Any man of colour, however conscious though he be of great natural gifts and of an iron resolution, will find his passage through life infinitely smoother if he cast his professional lot amongst his own countrymen.

Cholera in Europe.

HAPPILY, the news that cholera is abroad in Europe no longer alarms the sanitary authorities in the United Kingdom. Here at home the lessons of practical science have been rigidly applied, and the careful guarding of the water supplies has rendered the country almost safe from invasion by cholera. Fifty years ago there would have been a considerable risk of a spread of any serious Continental outbreak to our country. At the present moment cases of the disease are reported from various parts of Europe. The epidemic has originated in the Far East under the favouring conditions of the Balkan War. It has doubtless been distributed far and wide by disbanded soldiers. Cases have occurred in St. Petersburg, and numerous districts of Russia have been also invaded. One case has occurred at Prague and another at the famous Bohemian watering place—Marienbad. It would be difficult to imagine a greater mishap to that popular spa. A Reuter's telegram from Bucharest states that the Roumanian Ministry of War anticipates a speedy end to the epidemic, which has so far destroyed 1,500 men out of a force of 500,000.

London is not Safe from Cholera.

As a water-borne disease, needless to say, cholera is preventable. In the United Kingdom close attention has been paid to the purity of our drinking water supplies, with the result that the disease has been kept at bay for more than a generation. For all that, our sense of security is, to a certain extent, based on a foundation of sand, owing to the fact that many of our large centres of population are supplied with water taken from sewage infected rivers. The case of London is notorious. There is a large aggregate amount of sewage discharged into the Thames above the intakes of the water companies. The saving clause is that as a rule a cholera patient would not be likely to infect the upper reaches of the river with his evacuations. Let such a contingency happen, however, and the metropolis would be brought face to face with the possibility of a vast outbreak of cholera. A precisely similar thing might well occur in the case of the Severn and the Trent, rivers which supply many towns and villages in their course. The fact that comparatively pure water is obtained for London and certain other great towns is no excuse for using sewage contaminated water as a drinking supply. Liverpool, Manchester, Birmingham, and other great towns have obtained supplies that are above suspicion. Why not London, the greatest and richest city in the world?

Dr. Jelley in the Public Eye. DR. JELLEY, the better known as the "Threepenny Doctor," has had a good many unfortunate collisions with the powers that be, legal or otherwise, in the East End of London. Last week he prosecuted a man who appears to have attempted to paste bills upon his windows in the presence of a disorderly mob. On that occasion the man was fined. A fortnight ago Dr. Jelley appeared before Coroner Westcott at Shoreditch. It appears that he had refused a certificate of death to the parents of a child who had died of summer diarrhœa, and whom he had seen twice only on the day before death. Asked why he had not given a certificate, he said that he refused because on four or five previous occasions registrars had refused to accept his certificates in cases in which he had not seen deceased persons one day before death. He regarded such action as impertinent. The coroner agreed that the registrars had no right to make laws of their own. That opinion we emphatically endorse. Any medical man whose certificates have been wrongly refused by a registrar would do well to go on granting certificates, as the onus of refusal and of the subsequent inquest would in that way be thrown upon the registrar.

Clerks and Death-Traps. MUCH has yet to be discovered, even in a civilised country like our own, about "man's inhumanity to man." Somewhere in the background of the countless thousands of toilers who have occasion to mourn their lot is quite an army of under-paid city clerks, to whose grievances public attention has recently been called. The sight of a procession of masked men and women, members of the National Union of Clerks, marching to Hyde Park the other day, where a meeting was held to protest "against working in death-traps," is sufficient comment upon the bad conditions under which many thousands of clerks have to work. The low wages, long hours, unpaid overtime, and unhealthy surroundings, with which they have to contend is only dimly realised by the general public, who never have the opportunity to peep behind the scenes after closing time, or to descend to dark and ill-ventilated basements where much of the clerical work is carried on. Nor are the city firms the only offenders in this respect. In one of the best-known West End drapery establishments, whose name is almost a household word, we have it on good authority that there exist underground offices in which human beings are made to toil whose only means of communication with the outside air is by a few tiny holes in the pavement, through which the street dust, swept by porters, descends in germ-laden showers upon the heads of the unfortunate clerks cooped up beneath. Nothing of this is visible, of course, to the public, and, worse still, no medical officer of health or sanitary inspector, let alone a Factory Act inspector, appears to have condemned the premises. Small wonder is it if the workers in such places become anæmic, suffer from chronic headache, or develop phthisis. The only remedy for such a state of affairs, which is a blot upon our civilisation, is an extension of the powers of medical inspection to all offices, rooms and places where clerical work is done, whether underground or otherwise. Underground bakehouses are rigorously inspected, why not, then, subterranean offices?

LEADING ARTICLES.

THE FRIENDLY SOCIETIES AND A STATE MEDICAL SERVICE.

THE idea of a State medical service has been often discussed of late years and has secured many adherents, both inside and outside the medical profession. Briefly defined, it may be described as a special department of the State organised for the purpose of providing medical service to all or any citizens as required, the cost to be paid for out of the national exchequer. It does not follow that medical aid would be asked for or accepted by all classes of citizens, any more than they avail themselves of the State church or of State education, or of the old age pension: public services to each of which in theory every subject is entitled to take advantage. So, too, with the hospital accommodation for fever cases provided in many districts out of the public purse. Any ratepayer may avail himself of that accommodation free of expense, but, as a matter of fact, its use is practically confined to the poorer classes of society. It is well to make this point clear, as the comprehension of the meaning of a State medical service has been to some extent obscured by the assumption that such an organisation would cater for the middle and upper classes, and in that way would lead to the dislocation of private medical practice. Such a sequence has not followed in the case of free State education, which certainly has not materially damaged the interests nor lessened the attendance at the better class private and the public schools. The principle of a State service has, of course, been formally adopted long ago in the Poor law legislation of the British Parliament. It has recently been greatly extended in the National Insurance Act, which, indeed, has brought the matter into general notice, if not actually within the range of practical politics. It is of considerable interest to have an opinion as to its merits or otherwise from those most directly concerned in a change of the kind in question. A declaration of the kind has come opportunely from the National Conference of Friendly Societies, which met last week in London. The gathering represented a membership of over 7,000,000 and a total revenue for 1912 of £7,492,051. Its views, therefore, carry weight and authority. It is interesting to learn that the Conference rejected resolutions in favour of a State medical service, while, on the other hand, they adopted a resolution urging the transference of medical benefits to approved societies. To read between the lines of this declaration is not an easy matter. The State has seen right to take over the administration of medical benefit from the societies, who were providing at four to six shillings per annum for a portion only of the far larger number of insured persons who were now paid for by the State at the rate of nine shillings per annum. The friendly societies are now faced with the difficulty of malingering and over-insurance. So long as human nature exists on its present lines so long will there be the temptation for an insured person who can draw more sick pay from the State and his society than the total amount of his wages to do so by an exaggeration or an actual counterfeiting of illness. The societies, however, have had over-insured members in their own ranks for many years, and the remedy then, as now, was in their own hands. As to the demand that the administration of medical benefit should be handed over to the friendly societies it is extremely unlikely that such a step will ever be taken; their relationships with the medical profession in the past discourage any such probability. It would be well if the medical profession were to take a hint from the National Conference of the Friendly Societies so far as the timely and careful discussion of the pros and cons of a State service are concerned. It seems hardly conceivable that the medical world has not considered the matter carefully and made up its mind as to the policy most likely to conduce to its future welfare. The problem of the State service has been greatly advanced and a clear understanding of its merits and demerits could not fail to strengthen the hands of the medical profession when called upon to treat it in the form of practical social legislation.

CURRENT TOPICS.

Experiments on Living Animals.

In a return showing the number and nature of experiments on living animals during 1912 under licences granted by Act of Parliament, recently published by the Home Office, it is stated that the total number of such experiments was 83,599, being 11,604 less than in 1911. Of these 78,556 experiments were performed by inoculation, hypodermic injection, and other means, without anæsthetics. The latter were mostly injections, but a few were feeding experiments, or the administration of various substances by the mouth or by inhalation, or the abstraction of blood by puncture or simple venesection. In no instance has a certificate dispensing with the use of anæsthetics been allowed for an experiment involving a serious operation. In a very large number of the experiments without anæsthetics the results are negative and the animals suffer no inconvenience whatever from the inoculation. These experiments are therefore entirely painless, a fact which may well be taken into consideration by the opponents of experimental research. Among the places registered for the performance of experiments is a sewage farm, where the character of an effluent may be tested by its effects upon the health of fish. The new places include Aberdeen (University), Ayr, and Cambridge (Research Hospital), Greenwich (Royal Naval College), Dumfries, Glasgow (University), Oxford (University), and Whitchurch (Glamorganshire). In London two fresh places were registered—the London School of Medicine for Women and the Royal College of Physicians and Surgeons (laboratories in Queen Square, Bloomsbury). The registration of the conjoint laboratory of the two colleges situated on the Victoria Embankment was cancelled. There are now 45 cities and towns where vivisection is authorised, London having 27 registered laboratories, Glasgow 14, Edinburgh 11, Aberdeen, Ayr, Cambridge, Cardiff, Manchester, Newcastle and Wakefield two each, other towns possessing one only. To licensees who returned experiments during 1912 590 certificates were granted dispensing with anæsthetics, 364 dispensing with the obligation to kill the animal before it recovered from anæsthesia, and 64 permitting experiments in illustration of lectures. There were no certificates for the further advancement of knowledge by testing previous discoveries, another fact of importance for platform speakers upon the subject. Much valuable work in connection with therapeutics and practical medicine has been carefully and conscientiously carried out by the various licensees in registered laboratories up and down the country.

The Dying Leech.

At a recent inquest in London surprise was expressed that leeches were still employed in medicine, the Coroner remarking that he thought they had gone out of use a half-century ago. As a matter of fact, over 60,000 leeches are sold in Great Britain every year, many thousands having to be imported from the Continent. There was a time, of course, when professional "leech-bleeders" plied their trade with much success, while the application of leeches was regarded as quite an orthodox practice by medical men, who were wont to bleed their patients every spring and fall. The systematic use of the leech was well known to the ancients, and its special property was referred to by Horace—*non missura cutem, nisi plena cruoris hirudo.* The rapid depletion of blood produced by such means is of distinct value in cases of engorgement of the right side of the heart or congestion of the liver, while in certain classes of practice the leech still finds favour in cases of black eyes and other painful contusions. Special breeding ponds are employed for leeches, the finest specimens coming from Hungary. If the faithful leech has now wriggled into comparative obscurity it is because the modern practitioner prefers a more scientific method for relieving pain and congestion, though it must be admitted that venous disgorgement can be carried out quite effectively by this harmless little creature when intelligently applied.

Influenza upon Virgin Soil.

It is always interesting to trace the course of an infection newly introduced among a community and to watch its effects upon fresh types of humanity. Such an outbreak is recorded in the *Guy's Hospital Gazette* by Staff-Surgeon R. W. B. Hall, R.N., the disease being influenza and the community the inhabitants of the small island of St. Kilda, the most westerly of the group of islands known as the Outer Hebrides. St. Kilda is only about two miles in length by one and a quarter at its greatest breadth, and boasts a population of seventy-nine. On June 20th last, H.M.S. *Active* was directed to proceed as soon as possible to the relief of the islanders who were reported to be suffering from a severe epidemic of influenza. The infection is believed to have been imported by a pleasure steamer from Glasgow, and on June 12th the entire population, with the exception of six, were suddenly attacked with a respiratory type of influenza, with severe headache, great pain in the eyes, burning skin, dryness of mouth and throat, persistent, dry cough, intense pains and aching in the limbs, and great prostration. The temperatures ranged from 99° to 104°. Only three or four cases showed physical signs of bronchitis. Most of the patients, inmates of stone cottages, were found huddled up in shawls with the one window tightly closed and the room full of fumes from a peat fire.

The relief party soon set to work and converted the church into a temporary hospital, the adjoining schoolroom being used as a dispensary, store, kitchen, etc. Meanwhile an expedition was organised by the authorities in Edinburgh, consisting of a Medical Officer of the Local Government Board, an Inspecting Officer, and two nurses, with stores and provisions. By the morning of the 24th the patients had considerably improved, so that the hospital was dismantled and restored to its proper condition of parish church. The six patients who had escaped infection were too feeble to render assistance, so that the islanders were, indeed, in a bad way, all being struck down together. When the news of the outbreak was received it was at first feared that the disease might have been typhus. The only other grave epidemic from which St. Kilda has suffered is that of small-pox, in 1724. Fortunately, in the present outbreak the infection was not of a very virulent type.

The Use of Dried Milk.

Of the numerous devices adopted by modern science to render the natural milk of animals, especially of the cow, free from objectionable qualities, none are so uniformly successful, perhaps, as that of drying. In the original Just-Hatmaker process for the manufacture of dried milk upon the large scale, the milk was allowed to fall upon revolving steel cylinders at a white heat, the resulting milk scales being reduced to powder by metal teeth. When this powder, which is light and flocculent, is mixed with water the original colour and flavour of the milk is reproduced. As a matter of fact, the milk retains its natural antiscorbutic properties, so that infants fed on a good brand of dried milk do not develop any of the deficiency diseases. This point was brought out by Dr. A. E. Naish, Senior Assistant Physician to the Royal Hospital, Sheffield, in a paper read before the recent Conference on Infant Mortality held at the Caxton Hall, (a) who followed up as many infants as possible up to the ages of three, four and five years. Regarded as a substitute for fresh cow's milk, dried milk answers remarkably well in infants' milk depôts, where this commodity can be retailed in measured quantities with far less risk of contamination than there is with ordinary milk. From the point of view of storage and distribution, powdered milk possesses great advantages over the fluid product, since it can be sent by post or packed in tins. Travellers upon the Continent find dried milk very useful for purposes of tea-making, when they cannot get anything else. Moreover, the germ-content of dried milk is exceedingly low, so that it deserves to occupy a high place in the treatment of infantile and other forms of epidemic enteritis prevalent at this season of the year.

The New Agnosticism.

The wisdom of the old agnostics consisted in knowing how little they knew. That seems a conclusive proposition, but we have improved on it. Sir Oliver Lodge at the British Association stood out as the rather exaggerated apostle of the new agnosticism. We may not follow him everywhere, but his mind is typical of the fashion of the day, and as such is to be studied. In the old days theology said it knew. It laid down a law on foundations of faith, and upheld it throughout. Dogma was its duty and delight. Then came the materialists. They made us believe our senses and now we doubt our sense. They fed us with facts and we had our fill. Dogma from being a theologic theory became a monopoly of materialism. Now the tables are turned again, and we are ready to admit that the spirits may have done it. The old agnostic alleged that nothing was true till it was proved so. The new one admits everything till it is proved untrue. From denying the probabilities of the universe we have come near to realising its possibilities and admitting them as facts. The comparative values of mental attitudes are hard to compute. It is largely a question of fashion. The ideas of the moment seem the only reasonable ones. This constant change of outlook is part of what we call progress. The race, after long enough, will have looked at everything from every point of view and may then have the beginnings of a true knowledge of the infinite limitations of human thought.

The Ascendancy of the Mediocre.

Medical mediocrity tends to increase. There are several reasons for its doing so, but no justification. By mediocrity we mean an indifferent competence. To be mediocre is not to be average. We must all assume we are average for any given quality till we have been proved otherwise; but we may all refrain from being mediocre. There are four obvious reasons why our profession leans to that fault nowadays. There is the ease of consultation. It is so simple to call in a man to share our responsibility that we are apt to divide our cases into those whose diagnosis and treatment stares us in the face and those which present a little difficulty and send us to consult with the specialist. Then there is knowledge of good things. We get fine results with tried remedies and are satisfied and so become chary of enterprise and avoid new methods because our old ones work "well enough." Then there is success. When that has come, effort is hardly needed. Reputation and a practised urbanity suffice. The busy life has little time for improvement. If the patients are satisfied with the physician, why not the physician with himself? He fulfils the demand and that is enough. These three are mediocrities of quality and affect the general practitioner. One is left for the specialist. His domain is getting narrower each day. As more is to be known about each thing, so the things each man can know are fewer. Our specialist, perfect though he be, has a narrow outlook. That makes for mediocrity, a mediocrity of quantity. This mediocre tyranny is rising up on us. We do not want to be of the elect. The mean is golden and so we do not strive. It is too easy to fulfil a demand and too hard to raise a new standard. As long as we can get along in comfort we are content. Lost ideals are nothing if we have cakes and ale.

The Progress of Biochemistry.

Few of the ancillary medical sciences have shown such activity as organic chemistry. Since the time of Liebig the *rapprochement* between chemistry and biology has been gradually becoming more complete up to the present day. Laboratory investigations have been going on quietly and steadily with a view of elucidating some of those problems of metabolism which possess a practical bearing upon the science of medicine. In the able and instructive address recently delivered by Dr. F. Gowland Hopkins on "The Dynamic Side of Biochemistry," at the Physiological Section of the British Association at Birmingham, the fact was emphasised that the present trend of research lies not so much in the separation and identification of products derived from the animal as with their reactions within the body itself. The biochemistry of the living cell and its relations with its neighbours has long attracted the attention of chemists and biologists alike, and different investigators have approached the subject from widely differing standpoints. It is significant to recall the part played by ferments in general metabolism, and it appears more than ever probable that all metabolic tissue reactions are activated, or catalysed, by enzymes. When one considers that even germs may be trained to perform certain biological functions, such as the splitting of sugars and alcohols, it is at least conceivable that the bioplasm of a body cell should be closely influenced by an enzyme whenever it may have to adjust itself to a new nutritive medium. Whatever be the outcome of modern biochemical researches, one thing is clear, namely, that the physical chemist must continue to play a most important part in the investigation of biological, and therefore of physiological phenomena.

(a) *The Medical Officer,* September 6th, 1913.

Favus and Immigrants.

The recent decision of the Alien Immigration Board in rejecting a married German woman suffering from favus, who had arrived in London with four young children in order to join her husband, a working tailor, in Manchester, raises once more the question of the prevalence of this disease. A few years ago there was quite a number of cases of favus in the East End of London, chiefly among elementary school children, but, thanks to the prompt action of the London County Council in opening a special school for those so affected, the disease was gradually and, it was hoped, finally, stamped out. The difficulty of dealing with favus is two-fold. In the first place, the diagnosis is by no means always obvious, especially if the characteristic lemon-yellow favus-cups, or scutula, and the so-called "mousy odour" are absent. A suspicious patchy baldness, accompanied by slight redness and, perhaps, scaliness, should lead to a further examination by the microscope. In the case referred to, the medical evidence was apparently somewhat conflicting, and had the services of an expert dermatologist been available its true nature might have been revealed sooner. Both favus and ordinary ringworm are notoriously misleading in their clinical aspects, even the most experienced being deceived at times. Then there is the treatment of favus, which often lasts a very long time. It is true that the visible lesions can be speedily cleared up with most parasiticide ointments, but the X-rays are, without doubt, the most potent agent in curing this disease which has been the source of so much trouble and annoyance to immigrants as well as to those whose duty it is to examine and treat them. If it be true, as is alleged, that favus is again on the increase in the East End, the re-opening of the favus centre may be necessary to cope with this pest.

The Royal Society of Medicine.

Members of the medical profession who belong to the Royal Society of Medicine will be looking forward to the opening of the work of the winter session at the Society's fine building at No. 1 Wimpole Street, W. The Section of Obstetrics and Gynæcology, under the presidency of Dr. W. S. A. Griffith, is the first to meet on October 9th, at 8 p.m. The Clinical Section, presided over by Mr. Charters J. Symonds, follows on October 10th with a meeting at 8.30 p.m. In the following week is the meeting of the Section of Surgery, under the presidency of Mr. G. H. Makins, which takes place on October 14th, at 5.30 p.m. Most of the remaining sections resume their work by the end of October, the first ballot for Fellows taking place on October 21st, at 5 p.m. Every facility now exists in the Society's house for the holding of scientific meetings and discussions, the reading of papers and the giving of demonstrations. The latter are now materially aided by the possession by the Society of two epidiascopes, which are capable of projecting solid, opaque bodies upon the screen in natural colours, thus obviating the necessity for diagrams and lantern slides. It is announced that by arrangement with the Secretary, Fellows can have the use of the epidiascopes for private demonstrations. As a place for quiet study and reading, the spacious and well-ventilated library can hardly be excelled. The advantages of Fellowship of the Royal Society of Medicine should appeal to all medical practitioners, whether resident in London or elsewhere, for the Transactions of all the various sections, issued monthly, are worth the subscription alone.

PERSONAL.

Mr. C. G. Haye Sharpe, M.B., Ch.B.Leeds, has been appointed Ophthalmic Surgeon to the Luton Education Committee.

It is announced that Dr. Arthur W. Limont, of Southport, has been invited to become next year's Mayor of that borough.

Dr. Alfred E. Carsberg, M.D.Cantab., has been appointed Physician to the Tuberculin Dispensary, Kennington Road, S.E.

It is announced that Dr. Wilfred Grenfell, C.M.G., of Labrador, is returning to England to deliver some lectures on "Midst Ice and Snow in Labrador."

The Lord Chancellor of Ireland has appointed Dr. Michael J. Kenny, of Bridge House, Tallow, to the Commission of the Peace for the County of Waterford.

Mrs. Alice Stalker, M.B., Ch.B., has been appointed Assistant School Medical Officer and Assistant Tuberculosis Officer to the Wigan Education Authority.

Miss Eva McCall, M.D., Assistant School Medical Officer under the Cambridgeshire County Council, has been appointed School Medical Officer of Jarrow, in succession to Dr. David H. Weir.

An interesting presentation was made the other day to Dr. J. B. Neal, upon his retirement from the post of Medical Superintendent of the St. John's Hill Infirmary, Wandsworth, after over 34 years' service.

Capt. F. W. W. Dawson, R.A.M.C., has been appointed Specialist in the Prevention of Disease, and placed in charge of the Bacteriological Research Laboratory at Brigade Headquarters, Ambala Cantonment.

Dr. F. J. Wethered, M.D., F.R.C.P., will deliver the first Hunterian Society's lecture in the library of St. Bartholomew's Hospital on Wednesday, October 8th, at 9 p.m., on "Fever in Pulmonary Tuberculosis, Its Significance and Therapeutical Indications." The attendance of members of the medical profession is invited.

Dr. John Wood, M.B., Ch.B.Aberd., of the Worcester General Infirmary, has been accepted for foreign missionary service in Calabar, Southern Nigeria, by the United Free Church of Scotland. Dr. Wood goes out as the representative of the Braid U.F. Church congregation, Edinburgh, and he will carry on extensive work at Itu.

CLINICAL LECTURE
ON
THE DIAGNOSIS OF CHRONIC ULCER OF THE STOMACH AND DUODENUM. (*a*)

By JAMES SHERREN, F.R.C.S.,

Surgeon to the London Hospital and to the Poplar Hospital for Accidents.

IN no department of surgery is diagnosis so difficult and treatment in the appropriate cases so satisfactory as that of digestive disorders, considered by the populace, and often by the profession, as "indigestion."

As an example of the mental attitude towards these questions of even the educated public, I would draw your attention to the following, which occurs on page 115 of the Final Report of the Royal Commission on University Education in London :—

"If nine out of ten patients who complain of frequent internal pain are suffering from indigestion, there is a danger of failing to diagnose cancer in the tenth case, and the delay resulting from the mistake may be fatal."

I would impress upon you that indigestion, while a useful term to denote symptoms associated with the ingestion of food, is often a dangerous cloak to hide ignorance. We should never be content until we have arrived at a conclusion as to its cause, remembering that in many instances it is but a danger signal of disease in other organs. Large numbers of patients with cholelithiasis and chronic disease of the appendix are treated medically, labelled dyspepsia, often with disastrous results.

Last week I operated upon two patients with gall-stones—one a man who had attended two large metropolitan hospitals, and had a course of treatment in each for ulcer; the other a woman with a grossly enlarged gall-bladder due to the lodgment of a stone in the ampulla of the cystic duct, who had been treated both in this country and in Germany as "nervous" dyspepsia. It has been my experience that "nervous" dyspepsia in the male is usually synonymous with chronic duodenal ulcer.

I would put forward the thesis that every case of painful indigestion should be regarded surgically. A large percentage of them are capable of cure by operation at an almost negligible risk when compared with the serious nature of the disease producing the symptoms.

I do not intend to discuss cases of pyloric stenosis either of the so-called congenital type—the best name for which is infantile pyloric stenosis—or that form met with in adults, due in 90 per cent. to the cicatrisation of a chronic ulcer of the first part of the duodenum.

The symptom common to all the cases under discussion is discomfort or pain. I would draw your attention first to points of importance in connection with this. The pain is felt at or above the umbilicus—its exact seat, right, left, upper or lower epigastric, should be noted. You should remember that left-sided pain is suggestive of gall-stones and gastric ulcer; right, of chronic duodenal ulcer. The nature of the pain must be elicited, whether a discomfort or real pain, whether associated with flatulence or not. Discomfort due to flatulence, a "stuffy" pain which many patients describe, should direct attention to the gall-bladder and ileocæcal region. "Wind" pains, if severe, are in many cases of biliary origin.

"Cramping" pains also own this cause, and are also associated with chronic duodenal ulcer and pyloric spasm.

Inquire as to the exact time of appearance of the pain and its regularity. Pain appearing at the same time day after day is a symptom of great importance in the diagnosis of chronic gastric and duodenal ulcers. Irregularity in its time of appearance—immediately after a meal at one time, during it on another occasion, an hour after on yet another—suggests gall-stones or chronic disease of the appendix. Night pain is of importance; when waking the patient between 1 and 2 a.m. regularly it is a characteristic symptom of chronic duodenal ulcer. It also occurs occasionally in chronic gastric ulcer when involving the pancreas, and in certain cases of right renal disease which may give symptoms simulating duodenal ulcer. Irregular pain at this time is a common symptom of gall-stones; thus in 70 cases with colic in whom I made definite inquiry with regard to this point 54 had had pain at night, 19 only at night, and in addition in five only rarely in the day-time.

The next important point is the relation of pain to taking food. Pain appearing at a definite regular time with a well-marked latent period is usually due to ulcer, if relieved by the next meal—duodenal ulcer. Occasionally in chronic gastric ulcer, if this is associated with an excess of acid or the ulcer is adherent to the pancreas, the pain is relieved temporarily by warm milk or sodii bicarb., but the permanent relief of the next *meal* is not present. Its association with vomiting and its immediate relief when the stomach is empty—the spontaneous vomiting of gastric ulcer, the urgent retching and frequent useless vomiting of biliary colic, the vomiting often self-induced in duodenal ulcer, are points which must be taken into consideration.

In a few cases of duodenal ulcer vomiting suggestive of the vomiting of biliary colic may occur, due, I believe, to pyloric spasm.

I have left until last the most important point in the diagnosis, the presence of *attacks*. By this I mean that for a period of time, a week or perhaps a month, the patient suffers regularly day after day from certain symptoms, followed by an interval of perfect or almost perfect digestive health. Unless pain of this character is present, you should hesitate before diagnosing chronic gastric or duodenal ulcer.

Pain present after a meal one day, waking the patient at night perhaps a week later, and so on, is a characteristic of gall-stones. Pain or discomfort, rarely absent, present day after day in varying degree is a character of the gastric disturbance associated with chronic appendicitis and chronic constipation.

Chronic gastric and duodenal ulcer must be diagnosed from malignant disease of the stomach and elsewhere in the abdomen, and from extra gastric disease such as gall-stones and chronic appendicitis, intestinal stasis, nervous diseases, urinary disease.

In every patient, not only must the alimentary system be investigated, but the whole body. The

---

(*a*) Delivered at the London Hospital, June 20th, 1913.

nervous system must not be neglected, the urine tested and rectal examination made. The importance of the latter in both sexes is great.

I may quote the following as examples.

A patient of 59 was sent to me in May, 1912, as carcinoma of the stomach. He had had indigestion off and on for several years, but for the preceding twelve months had had it each day, slight epigastric pain one to two hours after food, without vomiting. A test meal showed absence of free HCl with a total acidity 23. On examination I found that his bladder was distended, due to an adenomatous enlargement of the prostate.

In another case a woman sent to me for the surgical treatment of her indigestion; rectal examination revealed a left pyosalpinx adherent to the sigmoid.

The gastric symptoms associated with diabetes and phthisis are more suggestive of those met with in chronic appendicitis or carcinoma of the stomach than chronic ulcer.

Before passing to the question of diagnosis it is well to have a clear idea of what may be considered the typical symptoms of ulcer. Our conception of these has entirely changed in the past few years. As a student, my ideal gastric ulcer patient was an anæmic girl of 20, with pain after food, vomiting, and hæmatemesis. Duodenal ulcer was looked on as a rare event, only diagnosable by hæmorrhage or perforation. We now know that chronic ulcers of the stomach or duodenum are diseases most often met with in the male sex between the ages of 30 and 50. Chronic duodenal eight times, chronic gastric three times as frequently in men as in women. In 160 cases of unperforated chronic duodenal ulcer operated upon to the beginning of June, 1913, only 21 were women; of 151 chronic gastric, 56 were women.

Pain is the most prominent symptom. Its striking feature is its occurrence in "attacks," intermitting with periods of perfect or almost perfect digestive health. In patients with chronic duodenal ulcer symptoms are more common in the winter time, and may be brought on by cold or wet.

In chronic gastric ulcer pain is closely associated with the ingestion of food, usually coming on within an hour, but there is always a definite latent period and the time of its onset is constant—it does not vary from meal to meal or day to day. This is of great importance in the diagnosis from appendix dyspepsia and intestinal stasis in which the pain may appear during or immediately after taking food on one day, the next perhaps one to two hours after.

Night pain is unusual; it occurred in 26 out of 130 in whom I made inquiry. In these cases the ulcer was on the posterior surface of the stomach and involved the pancreas.

Vomiting is generally present at some time during the course of the disease, but is often infrequent, and many cases come to operation without its occurrence. If stenosis is present, either at the pylorus or in the body of the stomach, vomiting is invariable.

Hæmatemesis in quantity that can be recognised by the naked eye is unusual; when it occurs it is a complication of the utmost gravity, demanding operation as soon as possible.

Examination of the gastric contents after a test-meal shows a slight increase in acidity or one little removed from normal, unless hour-glass contraction has taken place, when it is usually diminished and free HCl often absent.

Although chronic gastric ulcer is more common among men, hour-glass stomach is more frequently met with in women. I have operated on 19 patients with hour-glass stomach, only four of whom were males. There is nothing in the history diagnostic of this condition. In many instances the most suggestive feature is the continuance of the symptoms; after many years of intermittent dyspepsia the symptoms persist, and it is this that brings the patient under the care of the surgeon, often sent as malignant disease. On palpating the abdomen in patients with hour-glass stomach I have often been able to feel peristalsis in a cardiac pouch and to appreciate that the contraction of this part of the stomach was associated with gurgling, as fluid was passed through the strait connecting the two pouches.

I have notes of the test-meals in 13 of these cases; in all except two there was a marked diminution in acidity, and in seven free HCl was absent. In the two with no diminution both were males, and in neither was the increase great—free HCl .13 and .14, with a total acidity of 57 and 64.

Chronic duodenal ulcer.—Undoubtedly, as insisted upon by Moynihan, the majority of cases present symptoms so definite that a diagnosis can be made with certainty. Among my 160 cases 123 were of this type. Of the remainder, difficulties arose in the diagnosis from gall-stones and from gastric ulcer.

Pain is the most characteristic feature; at first it amounts only to a sense of uneasiness or a feeling of distension about two hours after food, relieved by the next meal, waking the patient between 1 and 2 a.m. This is the hunger pain of Moynihan. Night pain is rarely absent. I have definite notes on this in 146 cases; it was absent in 20 only.

Remission of symptoms is most important in diagnosis; if there is no remission there is no ulcer. Between the attacks the patient is in perfect health. Worry, cold, over-work may all bring on an attack.

Spontaneous vomiting is unusual, but self-induced vomiting—rare in gastric ulcer—is often a characteristic feature.

Pain may be absent in the late stages of the disease when pyloric obstruction has led to gastric dilatation, although the ulcer is still unhealed.

I have come across several cases in which there has been a complete absence of pain throughout the whole course of the disease, the symptoms consisting of attacks of dilated stomach vomiting with intervals of perfect health.

It has been stated that a chronic duodenal ulcer may be latent, giving evidence of its existence first by perforation or hæmorrhage. This is unusual. In ten cases operated upon for severe melæna, all gave a long standing history typical of the condition. Among 30 cases of perforation, in five no previous history could be obtained, but two of these were acute ulcers.

Examination of the gastric contents after a test-meal may be of great help in diagnosis. Unless complicated by secondary gastric dilatation or recent hæmorrhage, there is an excess of free HCl and the total acidity is high. In those cases in which the symptoms due to gall-stones or disease in the ileo-cæcal region mimic those of duodenal ulcer, the reverse usually obtains.

The ordinary physical examination of the patient is often entirely negative, particularly in chronic duodenal ulcer.

It is well after taking the history to carry out the examination in a routine manner. The general appearance of the patient should first receive attention, but remember that the so-called dyspeptic looking individual is not the type in whom organic stomach disease is found. Unless hæmatemesis or severe vomiting has occurred, they are often healthy looking individuals.

The condition of the teeth must be next investigated, remembering that tooth plates often conceal a multitude of septic stumps.

The whole abdomen should then be inspected in a good light, looking for the narrow upper abdomen of visceroptosis, swellings, visible peristalsis, etc.; then palpation at first general, noting the degree of rigidity or tenderness; then local, first in the epigastric region. Careful coaxing here will often cause a contraction of the cardiac pouch of an hour-glass stomach or an early gastric dilatation that can be felt. Then the examination should be continued on the right side, searching for swellings and tenderness under the ribs and the presence of movable kidney. Tenderness in right iliac region should be noted as indicating possible disease in the ileo-cæcal region. Finally, a careful rectal examination should be made and the urine examined.

The condition of the heart, lungs, and nervous system must never be neglected.

This examination taken with the history will usually lead to the case being put into one of two groups; either it is a definite case of chronic gastric or duodenal ulcer or gall-stones or it is indeterminate, of the gall-stone-duodenal type, or the appendix-intestinal stasis and gastric ulcer.

Typical cases of duodenal ulcer, gastric ulcer, gall-stones are obvious, and further investigation, although interesting, does not give more help. This applies to 75 per cent. of cases of chronic duodenal and about 40 per cent. of cases of chronic gastric ulcer.

Where there is doubt further investigation should be carried out, even although it is obvious that the case is one for surgical intervention. Every endeavour should be made to come to a diagnosis before exploring the abdomen. I believe this is important not only from the point of view of the initial incision and strength of abdominal wall, but for quickness of operating and avoidance of unnecessary abdominal manipulation—points of the utmost importance in a speedy convalescence. It should be our endeavour to deal with the disease through as small an incision as is compatible with thorough work.

There are four special methods of examination which must be discussed:—

1. Direct of the stomach.
2. Inflation.
3. X-ray after a bismuth meal.
4. Examination of gastric contents after a test-meal.

With regard to direct examination of the stomach, in an address on carcinoma of the stomach given two years ago I used these words: "You may be surprised that I have not mentioned the gastroscope as a diagnostic instrument. In its present form its use is probably more dangerous than exploratory laparotomy (*a*) in the hands of a competent surgeon. It is difficult if not impossible, to see the whole of the stomach; other parts of the intestinal canal and other viscera cannot be investigated."

This opinion I still hold, although the direct vision gastroscope of Hill-Herschell is a less dangerous instrument than the old indirect one.

With regard to inflation of the stomach. This is a mode of investigation that I believe is of little help in diagnosis, and one which should certainly not become routine. The size of the stomach is of no moment, providing it is carrying out its work efficiently. Early organic obstruction cannot be recognised by this means. It is useful for demonstration purposes, and very occasionally an hour-glass stomach may become evident.

X-ray examination of the stomach after bismuth meals is disappointing from the point of view of differential diagnosis. It, of course, gives evidence of organic obstruction, also of gastroptosis and many cases of hour-glass stomach. But these are not the cases in which help is needed.

In chronic duodenal ulcer the stomach usually empties itself very rapidly indeed, with vigorous contractions of the pyloric end of the stomach; the same is often noted in chronic gastric ulcer with, in addition, if the ulcer is situated on the lesser curvature, often spasmodic hour-glass stomach.

In twenty consecutive cases of chronic duodenal ulcer without stenosis, in fourteen vigorous contractions of the pyloric end of the stomach with rapid emptying were noted "suggestive of ulcer." In one an hour-glass stomach was diagnosed; in five nothing abnormal was noted. In thirteen cases of chronic gastric ulcer without stenosis, vigorous contractions suggestive of ulcer were noticed in eight; in the remainder nothing abnormal was noted.

These vigorous contractions of the pyloric end of the stomach are by no means confined to cases of chronic ulcer of the stomach and duodenum. In seven consecutive cases of gall-stones, vigorous contractions suggestive of ulcer were seen in five. These were all cases in which free HCl was present—in three of them in excess. In the cases in which nothing abnormal was noted free HCl was absent. It is in the cases in which there is a high acidity that help is needed in the diagnosis, but these are just those in which this method gives no aid.

Again, in the dyspepsia associated with chronic appendicular disease, in several cases vigorous contractions suggestive of ulcer were noted.

With regard to the diagnosis of hour-glass stomach, in five consecutive cases this was made correctly in four. On the other hand, in a case of gall-stones and one of chronic appendicitis, this diagnosis was erroneously suggested.

I have excluded the cases in which clinically a stenosis was present either in the first part of the duodenum or at the pylorus producing a dilated stomach, or in the body producing hour-glass stomach detected by other means.

In conclusion, it has been my experience that the information obtained by X-ray examination after a bismuth meal is at present of no aid in diagnosis. In all the cases in which there was any doubt from the clinical findings, no help whatever was given by this method of investigation.

With regard to the X-ray diagnosis of hour-glass stomach. In the majority of cases in which an hour-glass contraction of the stomach is seen it is not of organic nature, but occurs in such various conditions as gall-stones, chronic appendicitis, duodenal ulcer, lesser curvature ulcer. In organic hour-glass stomach the lower pouch is often very difficult to make out. At the first examination the gastric contents appear to be held up at its cardiac end; if examined five or six hours later a second pouch will often become visible with sometimes a trickle of bismuth between.

Test-meals.—The results of this method of examination are very helpful, particularly in the diagnosis between duodenal ulcer and gall-stones, chronic gastric ulcer, and appendicular disease. If gastric stasis is suspected, a stomach-tube should first be passed to see if there is any residue; if there is, the stomach should be washed out before giving the test-meal.

All the results have been worked out by Drs. Paton and Tidy in the Clinical Laboratory. They

---

(*a*) *British Medical Journal*, June 24th, 1911.

have published an account of of their methods. *(a)* The test-meals consist of two large cups of tea, with milk and sugar if desired, and two pieces of toast lightly buttered. The gastric contents are withdrawn in an hour.

I now wish briefly to discuss the points in the diagnosis from malignant disease of the stomach, gall-stones, chronic appendicitis, chronic constipation, urinary diseases.

It is rarely that the diagnosis between chronic gastric ulcer and carcinoma has to be made. Carcinoma in its early stages, unless it attacks the orifices producing mechanical obstruction, resembles more the gastric disturbance associated with gall-stones and chronic appendicitis. Many more cases of this nature are erroneously diagnosed as carcinoma than chronic ulcers.

There is, however, one complication of chronic gastric ulcer which in its symptoms mimics carcinoma; that is hour-glass stomach.

Cases of carcinoma of the stomach may be divided into three groups:—(1) Following previous gastric disease; (2) primary; (3) latent.

It is in the first group that the difficulty arises. After several "attacks" of gastric ulcer one occurs after which the symptoms remain day after day. This is also met with in hour-glass stomach. In this group of cases X-ray examination after a bismuth meal and the result of a test-meal may enable the diagnosis to be made. In cases of carcinoma secondary to gastric ulcer, free HCl is usually present and the total acidity is about normal. In hour-glass stomach free HCl is often absent and the total acidity low.

In carcinoma developing in a previously healthy stomach the symptoms are insidious, but rarely suggest those of chronic ulcer. In this group free HCl is usually absent and the total acidity is low; occasionally the gastric dilatation resulting from the scarring of an old duodenal ulcer may raise a suspicion of malignant disease. This will nearly always be dispelled by a careful history.

The greatest difficulty rises in the diagnosis between gall-stones and duodenal and chronic gastric ulcer. Here the *greatest* help is obtained from the history. The points to be remembered are the irregularity of the pain and the frequency of night attacks in gall-stones. If vomiting is present it is usually accompanied by much retching, and brings no relief. As previously pointed out, free HCl is often absent and total acidity low.

In the dyspepsia associated with chronic disease of the appendix, the symptoms may mimic either gastric or duodenal ulcer, but the clear-cut course is absent. Pain is usually felt in the epigastrium, occurring sometimes in irregular attacks, at others being present nearly every day. It bears no regular definite relation to food being felt for example an hour after one meal, immediately after or even during another. It may be referred to the right iliac fossa where tenderness may be present, the pain on pressure being appreciated in the epigastric region. Nausea is frequent but vomiting uncommon, although hæmatemasis may occur. The condition is confined to no age (youngest 18, oldest 67) but most of my patients were between the age of 30 and 40. The sex distribution differs little from that of other types of appendicular disease. Several of the older ones were sent to me as carcinoma of the stomach.

A test-meal is often an aid. As a rule, acidity is low, and frequently there is an absence of free HCl, which is extremely suggestive. Thus among 39 consecutive cases in which test-meals were given, acidity free and total was diminished in 21, free HCl was absent in 15 of these, normal in seven, a little raised in 11, but only in two was it high. One free HCl .22, total acidity 84, the other free HCl .30, total acidity 93.

The type of appendix found in this disease is interesting. In 63 patients upon whom I operated for appendicular dyspepsia, in 49 the appendix was of the obliterative type, often being very adherent.

The dyspepsia associated with chronic constipation may mimic very closely that of chronic appendicitis. Unlike the latter, however, it is more common in women, and is usually associated with a frequent or constant pain in the right iliac fossa. The test-meals show the same low acidity.

In chronic appendicitis removal of the appendix alone effects a cure; in chronic constipation (intestinal stasis), often associated with gastroptosis, ileal kink, Jackson's membrane, regulating the bowels and wearing an abdominal belt will make the patient comfortable in many cases. If operation is necessary, then not only must the appendix be removed, but the ileal kink should be dealt with and sometimes the cæcum or ascending colon removed and the end of the ileum implanted into the transverse colon. I look on ileo-sigmoidostomy alone as a procedure followed by little permanent benefit, and often bringing in its train fresh complications.

I must now pass on to what may seem to you to be somewhat far-fetched and little likely to arise in actual practice; that is the diagnosis between gastric and duodenal ulcer and urinary disease. It is impossible to lay down any certain rules, but it is a subject to bear in mind.

I have already alluded to one case in which the symptoms were due to enlarged prostate, of which the patient was unaware. This belongs to the group described by Rosenheim as "uro-kinetic dyspepsia." I would remind you that mucous ulcers of the duodenum may complicate infections of the urinary tract.

There is yet another group in which the pain of surgical renal disease simulates that of gastric disease, or in which gastric disease is diagnosed by competent physicians as renal disease.

I have two patients in hospital at the present time, both seen by eminent physicians, and thought to be suffering from left renal colic. In the one I found a chronic duodenal ulcer; in the other, in which the symptoms mimicked left renal colic even to the pain shooting into the testicle, there was an indurated ulcer high up on the posterior wall of the stomach, which had perforated, and was adherent to the pancreas. I removed it by transgastric excision. I have known the pain in other cases of posterior ulcer adherent to the pancreas radiate to the testis.

Until a few weeks ago I was unaware that the presence of a stone in the pelvis of the kidney would cause symptoms closely resembling those of chronic duodenal ulcer.

I have under my care now two patients in both of whom pain was felt at 10.30 a.m. and 4 p.m., relieved by food; it woke them in the early hours of the morning, but—and this is important—from the time of its onset there were no free intervals; the pain continued day after day. In one patient there was nothing to suggest kidney, and in the other there had been in addition two attacks of renal colic.

In this group, as in the others, the symptoms of gastric or duodenal ulcer are never absolutely copied.

As a rule, the pain is lateral in the abdomen. Although in the two cases referred to it was on the right side of the abdomen on a level with the umbilicus, but, as one patient said, "struck" through to the back. In these, as in all the anomalous cases, every method of examination must be tried, and only rarely will this fail.

(a) *Quarterly Journal of Medicine*, July, 1911. Vol. 4. No. 16.

In conclusion, I would add that careful attention to the history and a thorough examination will lead to the correct diagnosis in most cases; in a few, examination even by the most "modern" method will fail to enable us to arrive at a conclusion. But if care is taken, although an exact diagnosis is not made, yet it can be confidently stated that the symptoms are the result of one of two causes, which can only be efficiently and safely treated by operation.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Professor V. Hutinel, Professor in the Clinique of Diseases of Children, Paris Faculty of Medicine. Subject: "Occurrence of Meningeal Reactions in the Course of Poliomyelitis."*

ORIGINAL PAPERS.

X-RAYS IN THE DIAGNOSIS OF ABNORMALITIES IN THE INTESTINAL TRACT.

By MAURICE R. J. HAYES, F.R.C.S.I.
Radiologist, Mater Misericordiæ Hospital, Dublin.

So much has been written recently on the subject of intestinal stasis, and the X-rays have assisted so materially in the recognition of this condition, that a contribution on the subject with which I am about to deal may be of interest.

In a paper on "X-Rays in the Diagnosis of Urinary Calculi" (Medical Press and Circular, January 4th, 1911), I stated that "Radiography should be employed as an aid to, and not a substitute for, the ordinary methods of diagnosis. The X-ray has proved to be such a 'short-cut' in the diagnosis of so many conditions, and it has relieved us so much of the necessity of making a careful analytical study of symptoms and signs, that we are becoming more and more inclined to resort to it to the exclusion of other trustworthy methods of clinical investigation."

That statement will bear repetition here. More especially at the present moment, when new territory is being explored, is it necessary to record carefully our observations, and, if at all possible, to check our findings at the subsequent operation.

The positions which the different parts of the intestinal tract occupy within the abdomen are so varied even in the same types of individuals, and in the erect and prone positions, that it is difficult to fix within narrow limits the "normal" sites of the stomach and the large intestine.

To interpret accurately the various shadows produced by the intestines when loaded with an opaque substance is not at all an easy matter, and in viewing the radiogram it must not be forgotten that we are looking at the shadow cast by the object and not the object itself; secondly, that the shadow of a loop of intestine when viewed obliquely gives the idea that the bowel is acutely kinked when in reality the curve may be the arc of a circle which may not be at all sufficient to cause delay to the passage of the intestinal contents. To this I shall refer later.

To examine the œsophagus, cachets containing 10 to 15 grains of bismuth carb. may be given, or the bismuth carb. may be mixed with milk and sago, arrowroot, or bread crumbs—2 oz. to 4 oz. of the carbonate to a pint of the vehicle may constitute a meal.

The Œsophagus in its cervical part may be studied by viewing it from one or other side of the neck. Before dealing with strictures I will refer briefly to two cases of diverticulum of the œsophagus which I have seen. Both patients were men, one aged 58 and the other 60.

In each the history and symptoms were typical of the condition. By pressing on the left side of the neck a considerable amount of mucus mixed with food was ejected into the mouth—a necessary procedure to begin with. With the fluorescent screen the bismuth food was seen to pass at first downwards and backwards towards the vertebral column, and then downwards and towards the right side into a sack which filled as more food was swallowed.

As the pouch became more distended a sense of discomfort was experienced, and each patient was conscious of the fact—which could be observed on the screen—that no food passed into the stomach. With each succeeding attempt to swallow, the shadow was seen to rise and fall, and sometimes the bismuth food regurgitated into the mouth. In each case when the pouch had filled none of the bismuth passed down the œsophagus, obstruction being due to pressure of the pouch. When, however, these patients were free to incline the head and neck forwards towards the right a sensation of relief was experienced, and portion of the bolus passed into the stomach.

One of these men was again radiographed four days after the first examination, when the pouch could be seen as clearly as if he had just then swallowed the bismuth, although none of the latter had been given in the interval. Fig. 1.

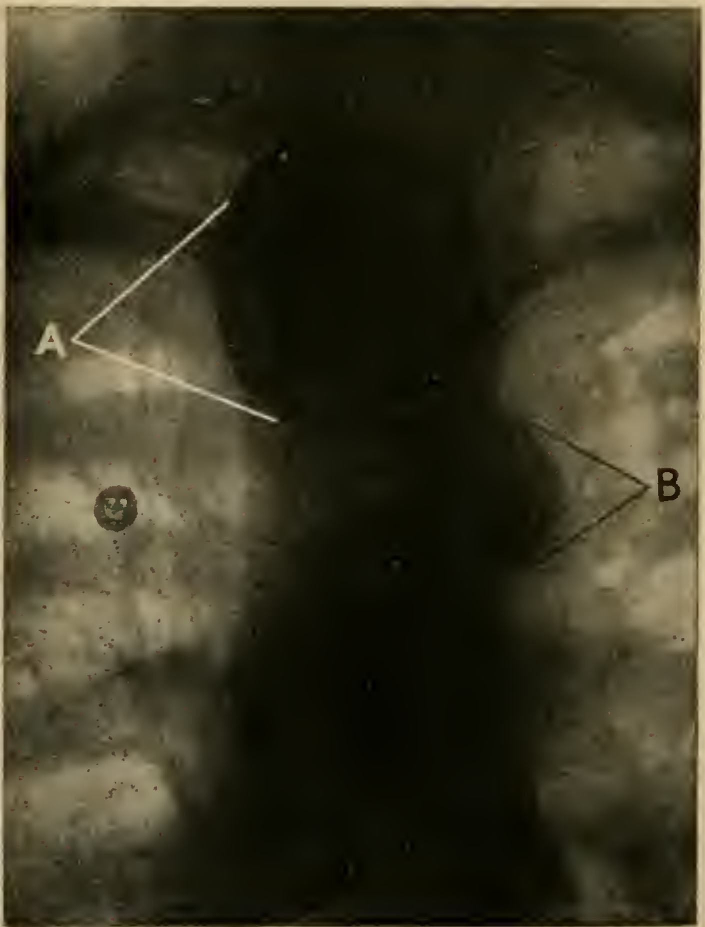


Fig. 1.—A. Diverticulum. B. Left lateral aortic bulge.

The intra-thoracic portion of the œsophagus in its whole extent can be examined by viewing the chest obliquely from the right side in front (right anterior oblique position) or from the left side behind (left posterior oblique position).

Obstruction to the free passage of food through the œsophagus may be caused also by the pressure of tumours, aneurysms, or a generally dilated aorta.

The cause of the obstruction may be readily detected by screen examination, but that a generally dilated aorta may produce symptoms of obstruction which suggest the presence of cancer is a fact that is sometimes forgotten.

Strictures of the œsophagus may be spasmodic, cicatricial, or malignant. Each variety has special X-ray characteristics. *Spasmodic strictures* usually occur near the cardiac end of the tube. The food passes normally downwards in an elongated oval mass, having a rounded head and a tapering tail. There is usually some dilatation above the contraction, but no food passes into the stomach. As more food is swallowed the size of the shadow increases and the peristaltic movements become more violent until after a few minutes the spasm relaxes and the contents enter the stomach with a sudden rush. Sometimes the food is retained in the œsophagus for a considerable period, and there may be an inclination to regurgitate it; but these patients rarely vomit, and they can tell you when the food has passed onwards.

In *cicatricial contraction* the antecedent history aids in the diagnosis. There may be seen on the screen one or more situations where some narrowing of the lumen exists, but the greatest narrowing is again just above the diaphragm. In these cases there is not as a rule complete hindrance to the passage of the food, which latter may be observed to trickle through in a narrow stream. Here again the œsophagus is dilated above the site of the stricture, but peristaltic movements are more active and violent, and as contraction follows contraction the contents sometimes rise as high as the arch of the aorta, or there may be regurgitation. These violent peristaltic movements are very typical of cicatricial stenosis, and once seen they are not soon forgotten. There is never a sudden emptying of the food into the stomach as occurs in the œsophagismus.

Malignant strictures are most commonly met with in men. The usual situation is near the cardiac end, but they frequently occur in the neighbourhood of the level of the bifurcation of the trachea. Many dark shadows may be observed along the line of the œsophagus, which are produced by the malignant lymphatic glands.

In cancer of the œsophagus the food passes normally until it reaches the site of the stricture, through which, as in the preceding variety, it may pass in a thin stream, or there may be complete occlusion of the canal.

Some dilatation always exists just above the site of the stricture, but peristaltic movements are absent or very feeble until the œsophagus is filled for some distance above the stricture. In malignant cases it is usual to find reverse peristalsis, and the food is not retained very long.

The feeble peristaltic movements are possibly due to the pathological changes occurring in the œsophagus, and the reverse peristaltic waves are caused reflexly by the food coming in contact with the ulcerated surface of the new growth. Owing to the emaciated condition of patients suffering from cancer of the gullet, it is easy to examine them with the X-ray.

The Stomach.—The position of the stomach varies when viewed in the erect and recumbent postures. When standing, the stomach assumes a vertical position in the left side of the abdomen, and the lesser curvature in its upper two-thirds forms a straight line which is almost parallel to and about 1½ inches to the left of the vertebral column, being a little nearer to it below than above. The pyloric portion then curves somewhat abruptly towards the middle line in the region of the umbilicus.

The cardiac portion, which is filled with gas, can be outlined as a clear space beneath the left arch of the diaphragm.

The greater curvature extends to a line drawn transversely between the summits of the iliac crests, the lesser curvature being from 1½ to 2 inches higher.

The pylorus is most frequently found about 2 inches above and to the right of the umbilicus.

In the recumbent position the stomach is mainly horizontal—the shadow at the cardiac ends broadens as most of the food gravitates into this portion, and there is a corresponding diminution in the size of the pyloric part of the stomach.

The greater curvature lies from 2 to 3 inches above the umbilicus. When one considers the numerous factors which may without giving rise to symptoms cause innumerable alterations in the shape of a flaccid organ like the stomach, the difficulty of easily detecting changes of a pathological nature can be readily understood. It is necessary to allude only to a few—*e.g.*, indiscretion in the selection of diet, overloading, loss of tone in the abdominal muscles, repeated pregnancies and tight lacing in women.

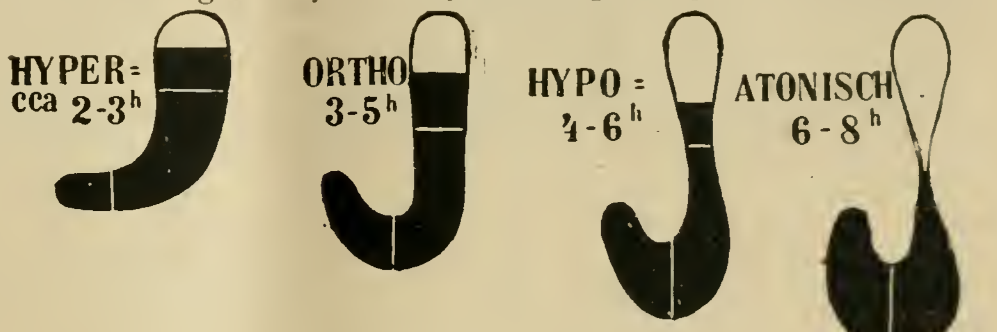


Fig. 2.

Fig. 2, after Holzknecht, shows four types of normal stomach. "Schlesinger, following Groedel's suggestion, has shown that these variations in form are simply due to differences in the habitual tone of the musculature. He names the four forms —hypertonic, orthotonic, hypotonic, and atonic." Holzknecht has never seen the hypertonic form in women, and he says: "We may consider one, two, three the typical forms for men, and two, three, four as the normal forms for women." ("Archives of the Röntgen Ray," July, 1912, pp. 61 and 62.)

The hypertonic form is not often met with. I have seen it on a few occasions only, and these were the rare instances in which the greater curvature of the stomach was situate at a higher level than the umbilicus when the patient was examined in the erect position.

Gastroptosis.—In determining the degree of this condition it would be advisable to be guided by permanent landmarks rather than by the umbilicus, which, though convenient, varies in position. It would be better, therefore, to take our measurements from a line drawn between the summits of the crests of the ilia. In the erect position the greater curvature of what may be regarded as the normal stomach extends to this line, and the degree of ptosis can be estimated by measuring the distance below this to which the greater curvature drops.

The dropped stomach is for the most part vertical in position and generally dilated and hypotonic. The cardiac end is elongated and tubular in appearance, and in those cases where the plyorus is not displaced the descent of the stomach would appear to be due to loss of muscular tone not only in the stomach, but in the abdominal muscles also. In extreme cases of gastroptosis the greater curvature may be found at the symphysis pubis. I shall show you a photograph of one such case, and yet this lady had no gastric symptoms. Fig. 3.

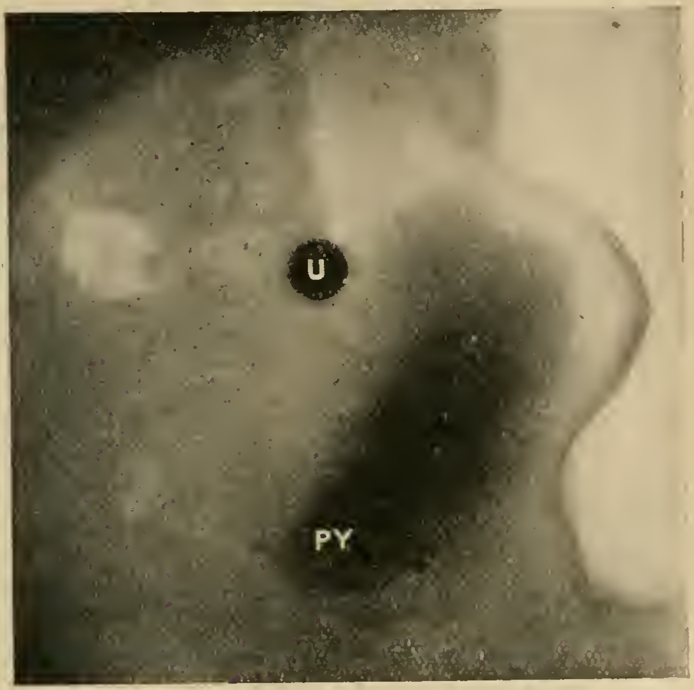


FIG. 3.—PY. Pyloric part of stomach. U. Umbilicus.

It has been contended by many that what have been radiographically diagnosed as "dropped stomachs" are not in reality such at all, and they say that the downward displacement of the organ is due to the weight of the ingested bismuth salt. To dispose of such a fallacious argument as this it is only necessary to point out that the first morsels of the food descend to the lowest level of the stomach, and that the entire amount which is subsequently swallowed does not make the greater curvature descend to any appreciable extent.

Ulcers of the Stomach.—It will be convenient to consider non-malignant and malignant ulcers together. It is possible to recognise large ulcers, especially if they be situate along the curvatures. Associated with them is spasm of the muscle, which produces an hour-glass-like appearance, and normal peristaltic movements are interfered with. When the contents have left the stomach a good photograph may show a thick shadow of bismuth adherent to the surface of the ulcer.

It is also said that the exact site of the ulcer can be localised by palpating the site of maximum tenderness. With this latter statement I am not in concord, and I regard it as a very unreliable sign. I will throw on the screen a slide the subject of which had this symptom. The general appearance and behaviour of the stomach strongly suggested the presence of an ulcer, yet at the operation no ulcer was found. In my experience a point of maximum tenderness to pressure over the stomach or duodenum cannot be regarded as strong presumptive evidence of the presence of an ulcer. I have frequently found it where no ulcer was discovered at the subsequent operation, and here again I would remind you that it is only comparatively recently that X-rays have been employed in the diagnosis of pathological conditions of the stomach, and although much laborious work has been done and carefully recorded, and a great deal of valuable information gained, the time has not yet arrived when accurate deductions can be drawn from all the various appearances which are to be observed on the screen or on the negative.

Hour-glass Stomach.—In the recognition of this condition there is no doubt that the X-ray is the most accurate diagnostic agent at our disposal. The patient must be examined in the erect and recumbent positions, and the condition must be carefully differentiated from hour-glass appearances which are produced by spasmodic contraction of the "mid-gastric sphincter," which latter relaxes after some minutes or may disappear on massaging the stomach.

As the bismuth food enters the stomach it does not pass beyond the constriction, and the cardiac portion assumes the appearance of an inverted cone. According to the degree of narrowing, much or little food may pass into the pyloric portion immediately.

In the recumbent posture the constriction is more evident, and the food may be seen passing through the narrow isthmus, the borders of which may present a jagged outline.

On examining the patient, within two or three hours the food will be seen in the pyloric part of the stomach, and the cardiac part may be empty.

On the skiagrams which I will show you these details can be seen. The second was taken five hours after the first. All the bismuth food had left the cardiac portion, and the pyloric portion still contains a large amount. Figs. 4 and 5.

The duodenum varies considerably in size, but its situation is almost constant. It is not unusual to find a kink at the duodeno-jejunal junction, which obstructs the free passage of the intestinal content. This kink is produced by the sudden descent of the jejunum, and as it may disappear when the patient lies down it is likely to escape detection at operation. In these cases the duodenum is very much enlarged, and peristaltic movements are extremely active. With each succeeding contraction the bismuth food can be seen to be violently driven on-

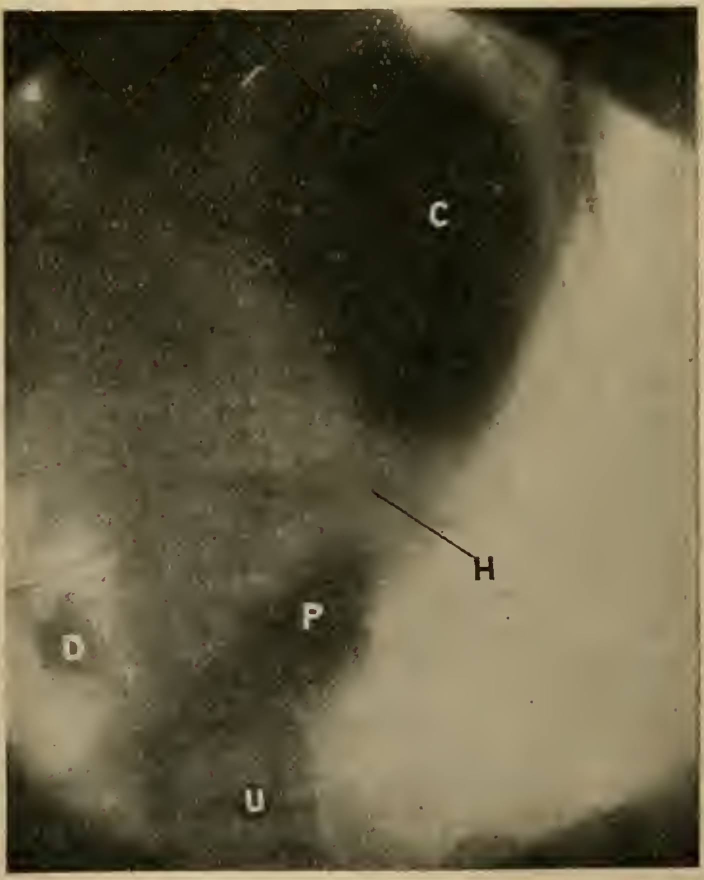


FIG. 4.—Hour-glass stomach ten minutes after a bismuth meal. C. and P. Cardiac and pyloric portions of stomach. D. Duodenum. H. Hour-glass constriction. U. Umbilicus.

wards to return in an axial stream which simulates reverse peristalsis.

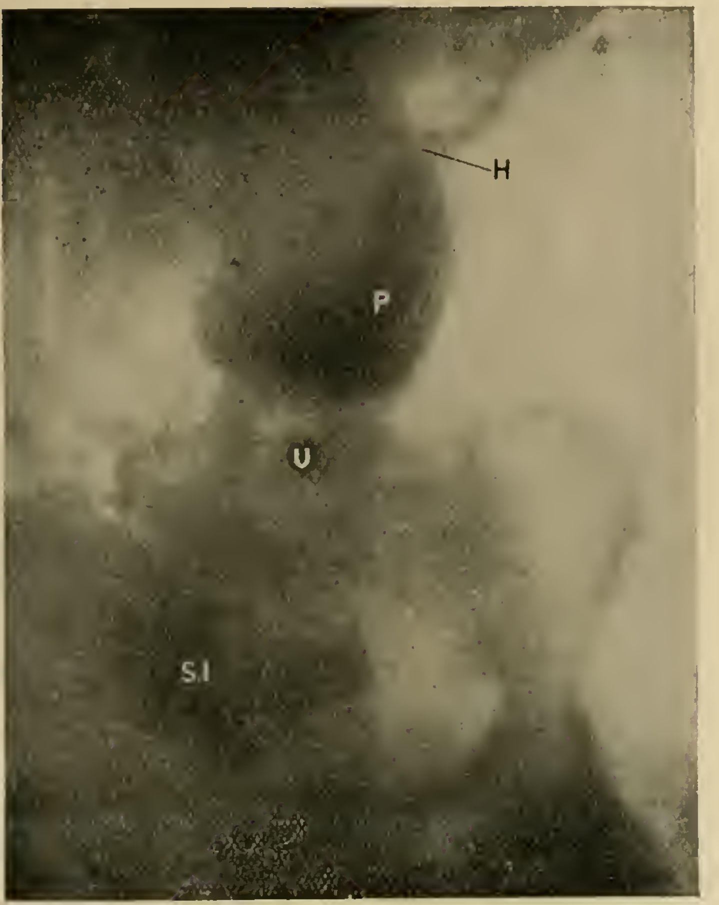


Fig. 5.—From same patient as Fig. 4, five hours after bismuth meal. H Hour-glass constriction. P. Pyloric part of stomach. S.I. Small intestine. U. Umbilicus.

I will show you photographs of such a condition from a young man, aged 23, in whom the diagnosis of duodenal ulcer had been made by a competent clinician. The X-ray examination showed the duodenum as above described, and demonstrated in addition a terminal ileal kink, both of which were verified at the subsequent operation.

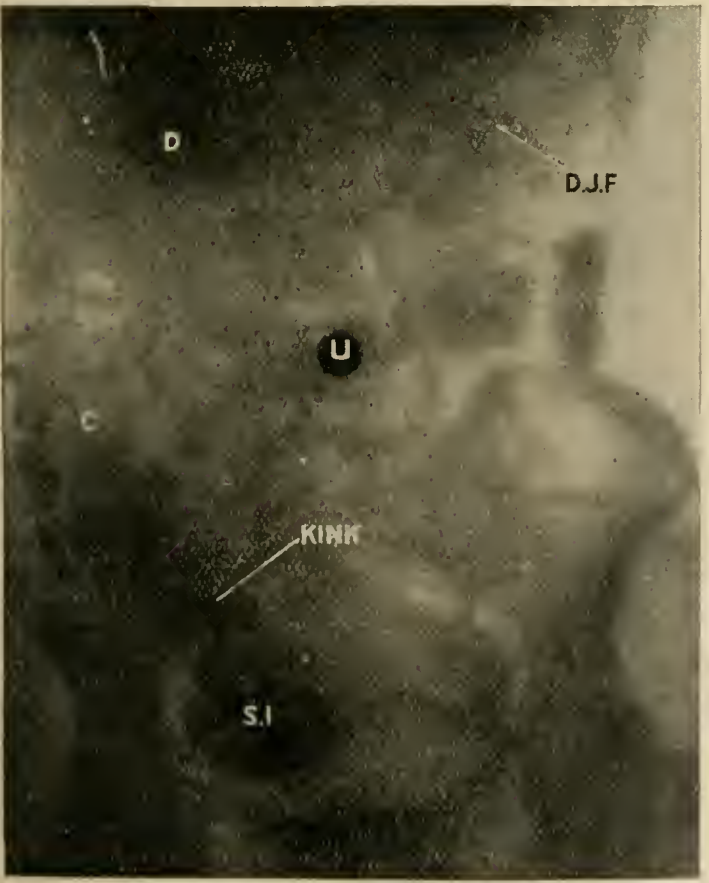


Fig. 6.—D.J.F. Duodeno-jejunal flexure. D. Duodenum. U. Umbilicus. C. Cæcum. S.I. Small intestine.

The Small Intestine.—When the bismuth food leaves the stomach it rapidly traverses the jejunum and accumulates in the lower loops of the ileum, which are coiled in the pelvis. The terminal part of the ileum ascends vertically to the cæcum. As it crosses the pelvic brim it is frequently found to be bound down to the latter by adhesions which cause kinkng when the patient is in the erect position. Acute or sub-acute inflammatory processes in the appendix are often responsible for the production of these adhesions. On raying the patient in four to six hours after the meal the terminal part of the ileum, as also the cæcum, can be studied. Kinks, if present, can be observed, but before making a diagnosis the ileum should be palpated in order to determine its mobility. I will show you several slides in which ileal kinks are to be seen, and I may add that the existence of these kinks was proved by operations. Fig 6.

The Large Intestine.—From its size and situation the large bowel readily lends itself to X-ray examination. It is at once recognised by being segmented.

The cæcum lies in front of the right iliac bone, but it is frequently dropped into the pelvis. In these latter cases it has a complete mesentery. It is often very large and flaccid. The appendix can be outlined also, but its shadow may be superimposed on that of the cæcum, which latter must be pressed upwards before it comes into view. The hepatic flexure extends upward to the margin of the right costal arch. The transverse colon crosses the abdomen at the level of the anterior iliac spines, and the splenic flexure is situate just beneath the left lower ribs. The descending colon drops vertically to the sigmoid and rectum. The transverse colon is often elongated and ptosed, and in its first part it may descend abruptly and be fixed to the ascending colon by adhesions or a Jackson's membrane. In these cases the appearance of the large bowel is like the letter H.

Ptosis of the large intestine is frequently met with, and I will show you photographs where it is seen to have dropped into the pelvis. Fig 7.

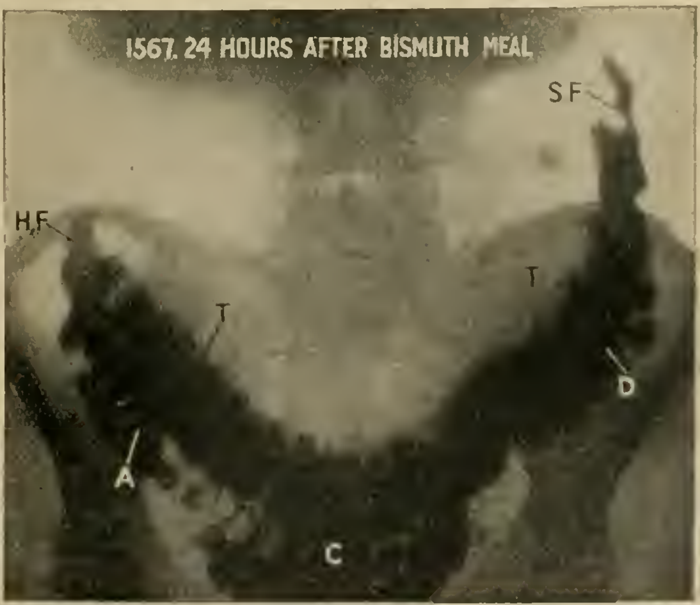


Fig. 7.—H.F. Hepatic flexure. S.F. Splenic flexure. C. Cæcum. A. Ascending colon. D. Descending colon. T.T. Transverse colon.

The normal time that the bismuth food takes to pass through the various parts of the intestinal tract may be stated to be as follows:—Food begins to pass through:

Pylorus, five to ten minutes after meal.
Stomach empty, four to six hours after meal.

Food enters cæcum, three and a half to four hours after meal.
Small intestine empty, seven hours after meal.
Ascending colon full, six hours after meal.
Splenic flexure reached, eight to nine hours after meal.
Rectum can be seen, from 20 to 24 hours after meal.

It must not be forgotten that the administration of purgatives on the days immediately preceding the giving of the bismuth meal increases the rate of flow of the intestinal contents for a day or two subsequently, and the routine administration of laxatives as a prelude to the X-ray examination of the intestinal tract is open to objection for this reason. While, however, the patient must not be suffering from diarrhœa at the time the examination is about to be made, care must be taken that constipation is not present.

HEREDITY AND SKULL FORM. (a)

By W. H. BROAD, M.D.,
Lecturer in Physical Anthropology, University of Liverpool.

As a preliminary to this lecture it is necessary to refer first of all to a few anthropological details.

Anthropology is the "science of man." *Physical anthropology* deals with man's physical characteristics, and especially those which differentiate him from the higher or anthropoid apes, as well as those characters which separate the human family into different races. On the present occasion we are concerned for a brief time with the shape of the cranium. Man's axial skeleton consists of a series of discs—the centra of the vertebræ—each with a posterior arc, the neural, and a larger anterior, or costal arc. These by their aggregation form a posterior canal, which contains the spinal cord, and an anterior, which contains the organs of respiration, digestion, and reproduction. The skull represents the modified upper end of the axial skeleton, and consists of three modified vertebræ, the centra of which are represented by the basi-occipital portion of the occipital bone and the bodies of the sphenoid and ethmoid. The posterior or neural canal becomes the cranium enclosing the brain, and the anterior or visceral arc forms the face, and contains the organs of sight, smell, and taste, and the apparatus of mastication. Although very many measurements are necessary to determine the anthropological characters of a skull, only two will be considered for the present purpose—namely, the cranial capacity and the cephalic index. The capacity of a cranium is determined by filling the cavity with some such medium as small shot, fine sand, or millet seed, which is then carefully measured. If the cranial bones are incomplete, and do not permit of gauging, recourse is had to the formula:

$$\frac{\text{height} \times \text{length} \times \text{breadth}}{2 \times 1.135}$$

which gives the *estimated* capacity.

The most striking characteristic which separates man from the anthropoid apes is the capacity of the cranium; the highest recorded capacity amongst anthropoids is 573 c.c., whilst in the lowest human type—the aboriginal Australian—the average is 1,100 c.c. Considerable difference exists between the cranial capacities of different races. If we take the average racial cranial capacities, we find the Australian aboriginal—as above mentioned—the lowest in the scale, an increased capacity in the yellow races, and the maximum amongst the civilised white races, the average for Great Britain being, for example, 1,550 c.c. Cranial capacity appears to vary with intellectual endowment, when taken as a racial character, but individually a capacious cranium does not *ipso facto* betoken mental ability.

Cephalic Index.—By means of callipers the maximum length is measured, and also the greatest breadth. From these measurements the *cephalic index* is determined thus:

$$\frac{\text{greatest breadth} \times 100}{\text{maximum length}}$$

Obviously it represents the percentage of breadth to length. In a long, narrow cranium the index will be at a lower figure than in a more rounded skull. When the cephalic index of a skull exceeds 80 it is termed *brachycephalic*, or broad-headed; when it is below 75 it is called *dolichocephalic*, or long-headed. Indices between 75 and 80 are *mesaticephalic*. Dolichocephaly is found as a racial characteristic of the black races; the Mongolians are brachycephalic, whilst the white civilised races usually possess mesaticephalic skulls. The extremes of dolichocephaly and brachycephaly are found respectively amongst the Eskimos (71) and the Lapps (86). It is curious that two races geographically close are so dissimilar physically, the explanation being that the former represent the earliest aboriginals of North-East Europe, a dolichocephalic race of the Glacial period, whilst the Lapps are the descendants of prehistoric Mongolian invaders.

Reference must be made in discussing racial head-form to the curious custom of artificial deformation of the skull, prevalent even at the present time in the Caucasus, the Crimea, Silesia, Tahiti, and Malacca. Skulls of the Incas or ancient Peruvians very frequently exhibit artificial flattening of the skull from before backwards. Religious motives, racial custom, or distinctions of caste were assigned as the reason for this custom. It was practised on both sexes, and of course during infancy. The operation was performed by applying pressure by means of boards, straps, or by manipulation. Goss maintains that where this custom is practised on both sexes, a few generations produce an inherited deformity. Cranial deformations due to other causes must also be taken into account when dealing with head-form—*e.g.*, pathological, posthumous, and synostotic (precocious union of one or more cranial bones).

Before leaving the subject of anthropological consideration of the skull-shape, I will refer to the curious correspondence which exists between the shape of the cranium and the hair in section. The black races are markedly "long-headed": the negro's hair in section is much longer than broad; the characteristic Mongolian skull is "round," as is also the section of his hair; and, finally, the head of the European corresponds in shape with the section of the hair in being a "medium" between the long and round shapes. The anthropoid ape, man's nearest ally, has since the Tertiary age made no progress whatever towards a higher state of intellectual development. Huxley has shown that the central nervous system of man and that of the anthropoid ape coincide structurally. There is also a correspondence in the viscera, bones, joints, and muscles. Especially with regard to the *size* of the brain, however, the difference is remarkable. The carcase of a full-grown gorilla is heavier than an average-sized European; but a healthy human brain would rarely be less than 32 ozs., whilst the largest ape's brain would not exceed 20 ozs. in weight. Duckworth gives the respective ratios between *brain weight* and *body weight*, in man and the gorilla respectively, as 1 : 36 in the former and 1 : 220 in the latter.

Most important is the *development* of the brain, and especially of the *fore-brain*. The cranium or

---

[a] A lecture delivered before the Liverpool Eugenics Education Society.

"brain case" assumes the size and shape of its contents; in other words, the brain shapes the cranium, and not the cranium the brain. The anterior lobes or frontal portion of the human brain are intimately associated with man's higher intellectual powers. In the left frontal lobe is the nerve centre which controls speech—the most important faculty of man. The fore-brain is poorly developed in apes, and the frontal portion of the cranium is ossified very early in life. Professor Deniker has shown that scarcely any growth occurs in the anterior portion of the ape's brain after the first year of life. The cranial sutures close early also in the anthropoids. In this respect (the early closure of the sutures) the skull of primitive man resembles that of the anthropoids. In the present time the cranial sutures do not begin to synostose until middle life. Broca affirms that the more the brain is exercised the longer the sutures persist. In idiots very early synostosis certainly does occur. According to Professor Ripley, the shape of the human head is one of the best available tests of race known. Its value is, at the same time, but imperfectly appreciated beyond the inner circle of professional anthropology. Yet it is so simple a phenomenon, both in principle and practical application, that it may readily be of use to the traveller and the not too superficial observer of men.

Of all racial characteristics, or, in other words, *hereditary* characteristics, the most important is skull-form. The reason that skull-form is primarily the chief expression of racial differences lies in its immunity from all disturbance from physical environment. Other racial characters, such as colour of hair and eyes, and stature especially, are open to modification by local circumstances; so that racial peculiarities are often obscured, or entirely reversed, by them. On the other hand, the general proportions of the head seem to be uninfluenced either by climate, by food supply or by economic status, or by habits of life; so that they stand as the clearest exponents which we possess of the permanent hereditary differences within the human species. It is generally accepted that rough stone flints found in late Tertiary and early Quaternary deposits are human artefacts, and prove the existence of man on the earth at these periods. Further, the upper portion of a cranium, a thigh bone, and three molar teeth were discovered in Java, on the banks of the Trinil River, in 1894, by Professor Dubois, in a Tertiary volcanic deposit. He gave the name of *Pithecanthropus erectus* to this animal, which has since been admitted to be human. The cranial capacity was estimated at 855 c.c., the sutures were synostosed, the brow ridges were prominent, and from the length of the femur (455 mm.) the stature was computed to be approximately 4 ft. 8 ins. In 1856 Fuhlrott discovered portions of a skeleton in the valley of the Neander, near Düsseldorf, together with early Quarternary or Glacial fauna. The cephalic index was 73.9. Massive brow ridges and synostosed sutures were exhibited, and the estimated capacity was 1,230 c.c. Marked narrowing of the frontal bone was evident—a condition reproduced to a certain degree in aboriginal Australians. The height of the individual was approximately the same as *Pithecanthropus*, but the whole skeleton is much more massive, and the thigh bones show strong muscular attachments, and are also curved in a manner that proves he must have walked with a bend at the knees. This individual (sometimes referred to as belonging to the Canstatt race) existed during the Pleistocene period of the Quaternary era. Then later were discovered the Spy, Cro-magnon, and other specimens of primitive man.

Following the Glacial period, a considerable change in climate occurs, and we have the advent of the Mediterranean race, or the Iberians, who peopled the whole of Western Europe. They were of short stature, with oval faces and markedly dolichocephalic skulls; the brow ridges were not abnormally prominent, and they had dark eyes and black hair.

The Iberians formed the primary stock from which the existing inhabitants of Great Britain and Western Europe are derived. These were the only inhabitants of the British Isles at the close of the palæolithic period. The earliest inhabitants of Britain were decidedly "long-headed"—more so than any Europeans to-day. The present Eskimos are regarded by some authorities as belonging to the same race, Boyd Dawkins agreeing with this theory. The next population in these islands was characterised by a considerably higher culture. Owing to their peculiar mode of interment, these were known as the "long-barrow" type, and still exhibit marked dolichocephaly. Succeeding was the "round-barrow" period. The culture of this period is greatly superior to the preceding era, as evidenced by the implements, pottery, etc. But more remarkable than the advance in culture was the extreme "broad-headedness," the cephalic index averaging 83, or 10 points more than the "long-barrow" average. The generally accepted view among anthropologists is that the "round-barrow" men came over from the mainland, bringing a culture derived from the East. Thurnam's view is that they were Celtic emigrants from Brittany; Dr. Rolleston inclines to the opinion that they were from Denmark.

After this we have the great Teutonic invasion from the north mainland, which ultimately settled the racial character of these islands. The Teutons (consisting of Angles, Saxons, Franks, Jutes, and Frisians) were, roughly speaking, all alike in physical shape—tall, tawny, blue-eyed, and with dolichocephalic skulls of large capacity. Their conquest was as much an ethnic conquest as one of force of arms, settling, as they did, in these islands, eventually interbreeding with the natives, and, as it were, imposing their racial characters on their descendants. Hence, briefly put, the people of Britain are first the Iberian stock, slightly modified later by the Mongolian invasion, but eventually absorbed into the Teutonic. Put in other words, the people of England are to a very large extent of Teutonic origin, into which stock elements of the mixed population of England have been grafted. The race thus formed has greater vigour and pliability of character than would have been the case had it been a pure race.

The prevailing type of skull-form in Britain to-day is that of the mesaticephalic type, the cephalic index averaging for the whole country 77 to 79. The long-headed type of skull, combined with a high cranial capacity, is characteristic of energy, domination in military and political affairs, assertive and enterprising—surely applicable to the English-speaking race, and the reason for the proud position of that race to-day. This racial character has been handed down to us by our ancestors as a heritage we ought to be proud of, and surely it behoves us to see to it that we shall hand it on to *our* successors unspoilt. Are we doing this? Karl Pearson says: "We are ceasing as a nation to breed intelligence as we did fifty to one hundred years ago. The mentally better stock in the nation is not reproducing itself as it did of old." Dr. Macnamara, in "The Character of the British People," states that "from an examination of individuals forming the labouring classes of London and other large towns, it is found that the third generation of town-dwellers shows a tendency to a reversion to the Iberian type at the expense of the Teuton element. Sociologists offer various remedies, such as segregation of the naturally defective, the lethal chamber, sterilisation of the unfit, emigration, and so on, but undoubtedly race culture or literal 'good breeding' is *the* remedy." Sir Francis Galton affirms that "eugenics must be introduced into the national conscience like a new religion. It has indeed strong claims to become an orthodox religious tenet of the future, for eugenics co-operates with the workings of nature by securing that humanity shall be represented by the fittest races. What nature does blindly, slowly, and ruthlessly, man may do providentially, quickly, and kindly. As it lies within his power, so it becomes his duty to succour neighbours who suffer misfortune. The improvement of our stock seems to me one of the highest objects we can reasonably attempt."

I have endeavoured briefly to show how our most important racial characteristic—skull-form—has been acquired and maintained by the influence of heredity; and if an interest has been awakened in the study of anthropology, the object of this short lecture is attained.

THE TREATMENT OF TUBERCULOUS JOINTS BY THE INTERNAL AND EXTERNAL USE OF IODINE.

By THOMAS DUTTON, M.D., M.R.C.P.

There has been so much discussion lately on the treatment of tuberculosis and tuberculous joints, some advocating tuberculin, while others support the knife, during which time I have been curing case after case by the above method of treatment with the addition of careful dieting, that I think the readers of the Medical Press and Circular may like to read the record of two recent cases which have undergone a most gratifying and quite satisfactory cure. What is more, the cases are still in the flesh and can be seen by any practitioner. I cannot, therefore, understand the new school of physicians and surgeons, the former using a most dangerous remedy, without any certain belief in its virtues as a cure, while the latter, when they strike a tuberculous joint, strike a danger zone, the consequences being most uncertain and fraught with the greatest danger to the patient. Although I own there are some brilliant successes. Since the close of that most fortunate time for the patient, I allude to the pupilage days, the young surgeon never has to compound drugs and see with his young eyes what matured practical skill can accomplish, knows now of no other treatment but by the knife, which, I believe, if only used in the interest of the patient, would thin their ranks and make many return to the far more difficult and scientific branch of treatment by drugs, diet, hygiene, included in the term medicine.

Case I.—M. E., circi, twenty-two years of age, was advised to consult me, after being under two learned practitioners, the last one gave a very grave prognosis and advised going to Guy's Hospital to consult a surgeon. She was a complete cripple, walking on crutches and had had a plaster splint on the leg for a year, besides being tortured by so-called open-air cure.

March 12th, 1912.—On examination I found the right knee-joint much swollen, very tender to the touch, most marked over the patella, the skin over the joint had a "par-boiled" appearance (a sure sign of tuberculosis), and there was evidence of fluid in the joint.

The subjective symptoms were: Great depression of spirits with a hopeless countenance, insomnia, loss of appetite, loss of flesh and anæmia. The pulse was small and weak, 94 per minute, temperature 99°.

I prescribed iodide of iron internally and a soluble iodine ointment to be applied night and morning, after the joint had been well fomented. A carefully constructed diet, with little waste material.

I advised the so-called "open-air" treatment to be abandoned, she was to avoid like poison, cold damp air, especially night air, and keep her window closed, but to take every advantage of warm, dry air and the sun's rays (according to my treatment for a quarter of a century of the cure of tuberculosis by the sun's rays). I also advised the splint to be abandoned.

March 18th.—She walked into my consulting room on her crutches, smiling and looking cheerful, and the reason, was, she had lost the dreadful aching pain and had been able to sleep and acknowledged it was quite a comfort to be free from cold air at night. "If you do nothing more for me I shall always be grateful for the relief you have given me." The symptoms were about the same, but the skin over the joint looked slightly rosy and there was less tenderness.

There was a gradual improvement week after week in the disease and more movement in the joint, and I instructed her how to go through some passive movement daily.

May 6th.—Patient's improvement so satisfactory that at her request I allowed her to go to Chertsey to see her mother. There a most unfortunate accident happened; trying to show how well she could bear her weight on the leg, the crutch slipped and she fell down some stone steps. She at once returned to London and came to see me. I found the ankle-joint much swollen and painful, but the knee-joint, although painful, was not much swollen. I was able to assure her that I believe, although the cure would be delayed, it would go on slowly, and my prognosis with the treatment being carried out actively, was correct.

July. 15th.—Patient came under my personal daily care. I made her discard her crutches and walk round the table every few hours with the aid of a thick walking stick. I directed the passing movements of the joint and put her on iron and strychnine mixture.

August 27th.—Patient could walk quite well and I discharged her as cured, but advised her to bathe the knee and ankle with hot sea water for a month, night and morning.

January 2nd, 1913.—Miss M. E. visited me to show me how well she could use the leg. She stated the only movement that was not so good as the other knee-joint was when going upstairs. The leg is quite normal.

Case II.—July 17th, 1912.—E. C., 15, came to me with her father, who told me his daughter had been treated at Guy's Hospital for four years, with tuberculosis wrist-joint. She had had hundreds of injections of tuberculin, but was gradually getting worse.

The right hand was in a splint, quite useless, the joint was swollen, the skin looked par-boiled, and there was a dull, aching pain. I was told she had been under so-called open-air treatment and had caught cold after cold. Pulse weak, 80, temperature 100° at night. I put her on the same treatment as the previous patient, instructed her to at once abandon keeping her window open at night and to avoid cold damp air, in every form, night and day. I pushed the iodide treatment until a pustular rash came out over her face and forehead

July 26th.—There was a great improvement in the look of the hand, the skin had a rose colour. She had lost all the dull, aching pain and slept well. The special diet prescribed had agreed well with her, having increased 2 lbs. in weight. I ordered the splint to be removed and the hand only supported in a sling. I also prescribed heliotherapy.

August 15th.—Still gaining in weight. Can move all fingers when hand is placed on a book.

October 2nd. — Improvement has gone on steadily. She can now use her hand fairly well. I advised the ointment to be discontinued and hand put into hot sea water for ten minutes every day. Increase in weight, 12 lbs.

December 10th.—The father writes:—"It really seems too good to be true after so long a time, but she uses her hand as if nothing had been amiss with it, and never feels anything at all of the old trouble."

In conclusion. I may state again I have many other such cases in different parts of England. Two cases of tuberculous glands treated with the injections of pneumosan, before the iodide treatment, did so well that a surgeon wrote and said he would always hesitate before operating on such glands in future.

ON THE LEPROSY BACILLUS AND ALLIED BACILLI. (*a*)

By Major E. R. ROST, M.R.C.S., L.R.C.P.Lond.,

Indian Medical Service.

Since 1904, when I published the results of my early work on leprosy in the *Indian Medical Gazette*, the number of workers has increased, so that we find in the March number of the *Transactions of the Society of Tropical Medicine* no less than six papers on the subject. Dr. A. G. R. Foulerton's paper in the *British Medical Journal* of February 10th, 1912, corroborates the view which has been expounded by the work of Capt. B. Williams and myself, and which was arrived at independently and worked out in collaboration later in India.

There is now no doubt whatever that the cultivations I obtained prior to 1904 were true cultures of the leprosy streptothrix. The leprolin which I made from these cultures produced such remarkably beneficial effects, that notwithstanding the severe adverse criticism which my work obtained, I was justified in my belief that I was right. In addition I had the clinical reports of medical men in different parts of the world, who had used the leprolin in all cases with success in varying degrees. Although the Government of India stopped the use of leprolin on the ground that it was prepared from contaminated cultures, the work was proceeded with, and I eventually, in 1909, discovered a method of obtaining cultures of the leprosy streptothrix on solid media, and worked out its pleomorphism, particularly as regards acid-fastness. The vaccine produced from these cultures produced the same beneficial effects with the same reaction as was produced by the original leprolin, and moreover, the varying acid-fastness and pleomorphism, together with the streptothrix nature of the growths, explained the error which my adverse critics had fallen into, with the loss to suffering mankind which the stopping of my treatment caused.

It will not be necessary for me to repeat in this paper the details connected with this work and the characters of the cultivations; these have already appeared in the *Scientific Memoirs of the Government of India*, and elsewhere. Briefly stated the bacteriological points are as follows. A medium is prepared of lemco broth (without salt or peptone) 250 c.c., milk 50 c.c., and the distillate prepared by condensing the steam passed over fish to which has been added a little caustic soda 250 c.c. This medium is inoculated with the blister fluid of lepers, preferably spontaneous blisters, or the juice expressed from nodules which do not bleed. Tubes of this medium are inoculated at room temperature, and after three or four weeks a surface growth may be obtained. Subculture on nutrient agar plates will show discrete colonies after about a week, of the size of a pin's head, opaque, orange-red, red, or grey, raised in the centre, humped, and moist. These colonies are circular, opaque with regular unbroken margins. Subculture on broth produces a surface growth of rosette-shaped masses, the broth remaining clear. The special differential characteristics are as follows:—

I. Examined at different periods of its growth a culture will show (*a*) a non-acid-fast streptothrix in the mycelial stage producing acid-fast rods. (*b*) A non-acid-fast diphtheroid bacillus producing acid-fast rods. (*c*) An acid-fast bacillus in clumps or an acid-fast mycelium.

II. The organism grows on starch and potato-glycerin, but not on pure albumen.

III. Its acid-fastness varies according to the fatty nature of the medium used.

IV. It stains readily with the cold simple aqueous aniline dyes, and is gram-positive.

V. It is non-motile.

VI. It grows best at 30° C., and after a few generations from original culture, is found to have grown after two or three days.

VII. It is very pleomorphic.

Several strains have been cultivated which differed slightly in appearance, and after prolonged subculture became more alike.

VIII. On a glucose litmus medium there is no formation of acid or gas; on mannite litmus medium there is no formation of acid or gas; on dulcite litmus medium there is no formation of acid or gas; on lactose litmus medium there is no formation of acid or gas; on bile salt media there is no growth.

IX. After exposure to 80° C. for fifteen minutes no subculture was obtained.

X. 1 in 500 bile salt prevents growth. Sheep's bile 1 in 100 prevents growth.

XI. Indol reaction is negative.

A reference to Dr. Foulerton's Milroy lectures will show that this organism belongs to the streptothriceæ, and the work of Capt. T. S. B. Williams, I.M.S., has quite clearly elucidated this in our collaborated work. I have obtained six strains of streptothrix from lepers, and these have been compared with the strain obtained by Capt. Williams. These strains at first showed slight variations as to acid-fastness and colour, but by long continual subculture they have become more alike. These seven strains have been injected into mudfish and frogs, and an identical disease has been produced in the fish and frogs by one injection of these cultures. The injections were made intra-peritoneally, and after from one to three months the fish or frogs died, the peritoneum, omentum, and surface of the liver being found to be studded with small white vesicles, containing acid-fast bacteria. In some cases the granulations were so well marked that the peritoneum appeared full of vesicular balls, while in others they were difficult to find. The cultivations obtained from these vesicles were injected into mudfish, and these fish died from the same disease. The cultivation for a long time defied me, but after defeating the numerous organisms with which these fish abound by flinging them into boiling oil, I succeeded in obtaining growths on fish-milk-broth in the cold incubator. Over 200 mudfish obtained from various sources in Lower Burma showed no such disease. It thus appears that leprosy streptothricosis may be induced with apparent ease in cold-blooded animals, and the recent work of Dr. Maurice Couret (*Journal of Experimental Medicine*, vol. xiii., No. 4, 1911), and of Dr. C. W. Duval (same journal, vol. xiv., No. 2, 1911) corroborate these experiments, though apparently they did not produce a fatal disease, as their injections were made subcutaneously.

It has also been shown by me (*Scientific Memoirs*, No. 42) that the disease can with difficulty be produced in the monkey by repeated injections of the

---

(*a*) Paper presented to the International Medical Congress, Section of Bacteriology and Immunity, London, August, 1913.

streptothrix, so that it would appear that the disease is more readily induced in cold-blooded animals than in warm, and this fact rather opens one's eyes to the possibility of the disease existing naturally in cold-blooded animals. In this connection the work which has been carried out on the so-called fish-tubercle disease by Hoorman, Morgenroth, Nicolas, Leseur, Bataillon, Dubard, and Terre (*Handbuch der Fischkrankheiten,* Bruno Hofer) is interesting, but I find no records of any streptothrix disease existing naturally in fish. This is surely a line of research worthy of investigation. However, my practical experience has proved to me that leprosy is inoculable through the skin. I have on record two cases where a slight nodule appeared over the site of a previous wound, in both cases the patients had lived and worked in a leper asylum; in both cases the nodule was excised and showed acid-fast bacilli in groups; in both cases there was no recurrence, no metastasis, no reappearance of the disease. Yet I am of opinion that if these two cases had been further exposed to inoculation repeatedly, the disease would have developed. My experiments on the monkey showed that we reduced his resistance so much that the disease did eventually take. Leprosy is, as a rule, such an insidious disease that any accurate history of infection is impossible. It is my belief that the disease is in the great majority of cases contracted through infected clothing. I examined the vests worn by lepers and obtained from one a cultivation of the streptothrix some years ago. Where skin diseases abound points of inoculation will therefore be very multiple and resistance easily broken down by persistent absorption.

Clinical Report.

The original cases treated by the old leprolin (which was a filtered preparation of very dilute cultures of the streptothrix) were reported in the *Indian Medical Gazette* for May, June, September, December 1904, and by Doctors M. de Beurmann and M. Gorgenat in the *Extrait des Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris,* December, 1907. Also in *Medicine* (Detroit), vol. xi., No. 3, March, 1905. Three of these cases have been seen by me lately, and there is no sign of the original disease, while I have received reports of four other cases treated and cured by the original leprolin who are stated to be in perfect health. At present I have thirty cases under treatment by the vaccine method, and since adopting this treatment in March, 1909, four cases have been discharged cured and one is being kept under observation. Of the twenty-two cases published in the *Indian Medical Gazette* for July, 1911, and July, 1912, several have improved to such an extent that only slight signs of the original disease remain, while in only two cases has there been no change either for better or for worse in their condition. It will be unnecessary for me to go into the detail of each case, I show here the results of treatment of some cases by photographs taken at different periods, but I will detail the special points which have been found to influence this treatment.

First, the vaccine is made from six weeks' broth-cultures of mixed streptothrix, *i.e.,* from the seven strains of streptothrix obtained from the seven original cultures of leprosy streptothrix. The culture is agitated and filtered through blotting-paper to remove large masses of bacteria, and is then sterilised. The method of weighing out dried culture and making up a percentage solution was found to be unnecessary, quite as good clinical results are obtained by the present method, and the reactions do not appear to vary.

Secondly, the vaccine is injected intra-muscularly once a week; for anæsthetic cases doses of from 1.5 to 3 c.c. can be given, while for tubercular or nodular cases not more than 1 c.c. should be given. The reaction varies considerably according to the dose and according to the severity of the case treated. The reaction temperature in a bad tubercular case may reach 103° F. with a dose of 1 c.c., or in a slighter nodular case may be only 100° F. The temperature generally lasts only three or four hours, during which time the nodular areas become red and hot. In anæsthetic cases the reaction is as a rule quite slight or nil, but there is generally a noticeable flushing of the lighter patches. The patients have all stated that the pains in the bones and joints are relieved, and that the sensation of heaviness of the limbs becomes lost.

The vaccine treatment has a very marked effect on ulcerations, and I have seen ulcers, which have defied treatment for many months, heal up in a few days after one injection. On the other hand, it occasionally happens that the reaction is very severe in bad nodular cases, even with small doses, and suppuration of nodules is liable to occur, but subsequent injections of vaccine have in these cases caused healing of ulcerations, and we may therefore look upon such severe reactions in bad cases as beneficial. In no case has the disease been accentuated, and in no case has there been any untoward result. Cases of leprotic fever have been markedly benefited by injections of the vaccine, and leprotic fever is no contra-indication to its use, but quite the reverse, as in these cases there is an unusually rapid subsidence of nodulation, as the temperature gradually reaches normal. The thirty cases which have been treated at the Kemendine Leper Asylum have had no other treatment beyond the weekly injections of vaccine. But there are certain other valuable adjuvants which may be beneficially employed, and which I have found to be useful previous to the present vaccine treatment, and which have been employed with great success in some private cases. Fish and milk should be excluded from the diet and fairly large doses of sodium chloride taken daily. Salt water baths and the application of erythema-causing ointments to the nodular patches, just after the injections of vaccine, in order to cause a better blood supply are advantageous. An ointment composed of sodium chloride and vaseline should also be rubbed into the affected areas.

With regard to any criticism of the results I have obtained by the vaccine treatment, I am fully aware of the fact that the disease does in some cases wear itself out or may spontaneously cease to progress at any period of it course. I have, moreover, carried out experiments with vaccines of other kinds of streptothrix, such as the smegma bacillus and the timothy grass bacillus, and I find that these vaccines will produce in larger doses a similar reaction, but no appreciable improvement or otherwise was noticed by their use. These facts are interesting as showing the relation between the various streptothriceæ, and that there is some substance contained in them which appears to cause a similar reaction. Similarly cases of actinomycosis have been treated by vaccines prepared from the particular strain of the "ray fungus" found in the discharge with a certain amount of improvement. Knowing that the leprosy streptothrix is an exceedingly pleomorphic organism, which fact, to my mind, explains the great variety of clinical manifestations, it would appear desirable to cultivate the streptothrix as far as possible from each individual case. We have produced five strains, and reports show that several more have been obtained, so that before long either by my method or the amœba method, cultivation from cases of leprosy should become common. I have, moreover, found that since using the mixed vaccine prepared from all seven strains in my possession, that the improvement of the cases treated has been more pronounced and uniform. The first case (of which I show photographs taken at various stages during the treatment) was an exceedingly advanced nodular and anæsthetic case with furfuraceous thickenings all over the body, so that there was not a square inch of healthy skin. Treatment was commenced on March 22nd, 1909, with T. L. O. vaccine 1/1000 grain, and was altered to the mixed vaccine after July, 1910. His temperature reactions reached at first 103° F. on the day of injection, and were slighter on the day following, as the temperature chart shows. By July, 1910, his body was completely clear of nodules and slight discolouration only remained. At present he has very slight thickenings on the fingers and lobules of the ears, otherwise he has no signs of the original disease.

The second case (illustrated by photographs) is that of a young Burmese girl, aged 10, who had thickenings on both cheeks, ears, nose, with ulceration and discharge from the nose, thickenings of wrists and fingers with anæsthesia; ulceration of feet and anæsthesia both legs; nodulation on back, gluteal region, and thighs. These signs have now practically disappeared except for slight thickening still remaining on the cheeks.

The third case is that of an Englishman who had been treated with success by the old leprolin in India. After the treatment was stopped the disease became rapidly worse, extending all over the body. He was an advanced case, with raised nodular areas all over the body, iritis, ulceration of alæ nasi, pendulous ears, and loss of sensation in the extremities. At one time the reaction was so severe that a large number of the nodular areas suppurated, but they subsequently healed up very quickly, leaving depressed scars. He left the asylum "cured" in April, 1912, having had no signs of the disease since December, 1910.

The fourth and fifth were nodular cases in Burmese young women, but they did not continue the treatment regularly and had few injections; they have, however both improved very much.

The sixth case was that of a Eurasian lad, æt. 9, with an anæsthetic patch on the right thigh, one anæsthetic patch on the chest, patches on the left elbow, wrist, and contractions of fingers. Treatment was started in October, 1909, and weekly injections were continued till August, 1910, when he was discharged "cured." He is still free from any signs of the disease.

The seventh case is that of a Roman Catholic priest, a severe nodular case as the photographs show. In this case also suppurations occurred after injections of the vaccine, the ulcerations subsequently healing. He left the asylum in July, 1910, and has continued the injections since. His face is now entirely clear of nodules, and there remain only a few nodules on the fingers and body.

The eighth case was a mild anæsthetic case, a Eurasian lad with anæsthetic patches on the left and right cheeks. He was cured in two months.

The ninth case was that of a young Burmese girl, with anæsthetic patches on the face, body, arms, and legs. She has now greatly improved, the sensation having returned in all the patches, and the white skin having resumed its natural pigment.

The tenth case, a Tamil boy, æt. 10, an anæsthetic case, the face, arms, body, back, thighs, and legs having before treatment numerous patches. He is now practically cured; the colour of the skin of the patches has not yet assumed the normal colour.

The eleventh case, an Indian Christian, æt. 30, was also an anæsthetic case. The disease affected principally the left shoulder, right leg, and foot, with severe shooting pains. This man appears to be cured.

The twelfth case, a Eurasian lad, æt. 13, with a tubercular nodule on the chin, anæsthetic patches on the legs and thighs. He started treatment in August, 1910, and was reported cured in my first clinical report in July, 1911 (*Indian Medical Gazette*).

These cases were treated previous to July, 1911, and roughly analysed they show the following results:—

1st case.—Severe nodular and anæsthetic. Almost cured.
2nd case.—Nodular and anæsthetic. Greatly improved.
3rd case.—Nodular and anæsthetic. Cured.
4th case.—Nodular. Improved.
5th case.—Nodular. Improved.
6th case.—Anæsthetic. Cured.
7th case.—Nodular and anæsthetic. Greatly improved.
8th case.—Mild anæsthesia. Cured.
9th case.—Anæsthetic. Almost cured.
10th case.—Anæsthetic. Almost cured.
11th case.—Anæsthetic. Apparently cured.
12th case.—Nodular and anæsthetic. Cured.

Four are definitely cured, 1 is apparently cured, 3 are almost cured, 2 are greatly improved, and 2 have improved.

Of the next series of cases 10 were reported in the *Indian Medical Gazette* for July, 1912, and 8 are recent cases.

13th case.—Anæsthetic and nodular. Greatly improved.
14th case.—Anæsthetic. Greatly improved.
15th case.—Anæsthetic and nodular. Improvement.
16th case.—Nodular. Greatly improved.
17th case.—Severe nodular. No improvement.
18th case.—Severe nodular and anæsthetic. Improvement.
19th case.—Anæsthetic. No improvement.
20th case.—Severe nodular and anæsthetic. Marked improvement.
21st case.—Nodular and anæsthetic. Greatly improved.
22nd case.—Anæsthetic. Greatly improved.

The treatment must necessarily be slow in such a chronic disease, but to my mind sufficient progress has been made to warrant a further and more extensive trial, and to show that leprosy has now been brought within the scope of the rational treatment of disease, and the word "Incurable" may be erased from our text-books.

Finally, I would like to bring forward one point in the prevention of the disease which I have already touched on—namely, the importance, firstly, of segregation, and, secondly, the importance of sterilising all clothing which has been worn by lepers. I have frequently found lepers among the staff of servants of Europeans living in the East. Would anyone like to use the same washerman (dhoby), who is washing the clothes of a leper? And yet precautions to ascertain for whom one's washerman washes are exceedingly rare in the East. How easy it must be to saturate a vest, washed in the same tub with the vest of a leper, with leprosy streptothrix. How easy it must be for the contagion in that vest to become inoculated in a hot climate where almost everyone has lichen tropicus or some numerous points of entrance for infection, and those who have weak resistance to this disease are liable to contract it. It would be best then to allow this idea to be publicly known, particularly in the East where leprosy is so common.

OPERATING THEATRES.

HAMPSTEAD HOSPITAL.

Operations by Mr. Jackson Clarke.

(*Continued from page* 327.)

The following are further cases operated on by Mr. Jackson Clarke:—

Case 11.—Prolapsus Uteri—Rectocele—Cystocele.—S.T., æt. 38. Admitted April 20th, 1911; discharged July 24th, 1911. Admitted for pneumonia and asthma under Dr. Sutherland. Transferred to surgical side on May 22nd. *Operation.*—May 24th; C.E.—ether. Ventrofixation: shortening of both round ligaments. Anæsthetic was followed by another brief but well-marked attack of pneumonia. Vagina easily admitted five fingers. Rectocele. *Second operation.*—June 28th; $CHCl_3$. Perineorrhaphy. Vaginal outlet narrowed by excising portion from both lateral and the posterior walls. On discharge a cystocele appeared to be developing. The abbreviated walls held well, but there appeared to be very little support anteriorly. Patient desired to go home before any further operative treatment was done. The patient presented herself at the hospital a year after operation. Materially benefited: the os uteri no longer descended beyond the upper part of the vagina.

Case 12.—Pyonephrosis.—E.R., æt. 30. Admitted April 24th, 1911; discharged July 20th, 1911. Operated upon at the London Hospital in February, 1910, for a left-sided B. coli perinephric abscess. In a note the Surgical Registrar stated that part of the abscess was definitely within the kidney, and that a good deal of semicalcareous material was found in addition. No T.B. in urine. Kidney drained. Since the operation a sinus with purulent discharge has persisted up to admission to the Hampstead Hospital. May 2nd:

Cystoscopy by Mr. Thomson Walker. A worm-like process of thick, yellow pus, unmixed with urine, seen escaping from the left ureter. Ureteric orifices, trigone, and mucous membrane of bladder normal. May 10th: *Operation.*—C.E.—ether. Nephrectomy by Mr. Jackson Clarke. A thick layer of very hard scar tissue surrounded kidney. Kidney with its abscess cavity adherent to 12th rib and diaphragm. Organ removed piecemeal from its capsule. Vessels and ureter clamped and ligatured. One large tube. The same evening it was noticed that air was being sucked in through the drainage tube. The large extent of the cavity and its extending under the diaphragm explained this phenomenon. For three weeks after the operation a markedly remittent temperature was shown (maximum 103.6° on the second day), the sloughy walls of the sinus becoming gradually clear in this time.

Comments by Mr. Jackson Clarke.

The cases reported last week were operated on during a period at which circumstances placed the gynæcological as well as the general surgical beds in my charge. The gynæcological beds have since been taken over by my colleague, Mr. Glendining. One case of painful constipation was given as a contrast to show that not every case of abdominal pain and tenderness requires operation. Of the two cases given to-day one was the most pronounced condition of relaxed vaginal outlet that has come to my notice, and my interest in it, beyond doing the best for the patient, was to compare the result with such as one might expect from a bad inguinal or umbilical hernia. In my hands at least the radical operations for surgical hernias give more reliable results than bad cases of uterine prolapse.

One feature of the second of the two cases reported above, that of pyonephrosis, was the aspiration of air into the wound. This might have led to a suspicion that the pleura had been penetrated, but this was not the case

With regard to the remaining cases published last week, they explain themslves sufficiently, and I have to thank Mr. V. C. Vesselovsky, late House Surgeon, for collecting these and other cases for me from the hospital notes.

As regards the *technique* of the operations I will dwell on one point only—the use of special swabs with tapes attached, as shown in the accompanying block. The swabs are carefully stitched so that the edges do not fray out. Such swabs were incorporated in sets of sterile dressings prepared according to my directions by Mr. Martindale first some ten years ago, as shown in Fig. 1. This is a complete set of overalls, towels, swabs, gauze rolls and bandages, suitable for abdominal and other surgical operations. The swabs have attached to them tapes, which are left hanging outside any cavity into which the swab is passed; pressure forceps are applied to the free end of the tape to prevent the possibility of the swab being left in the cavity.

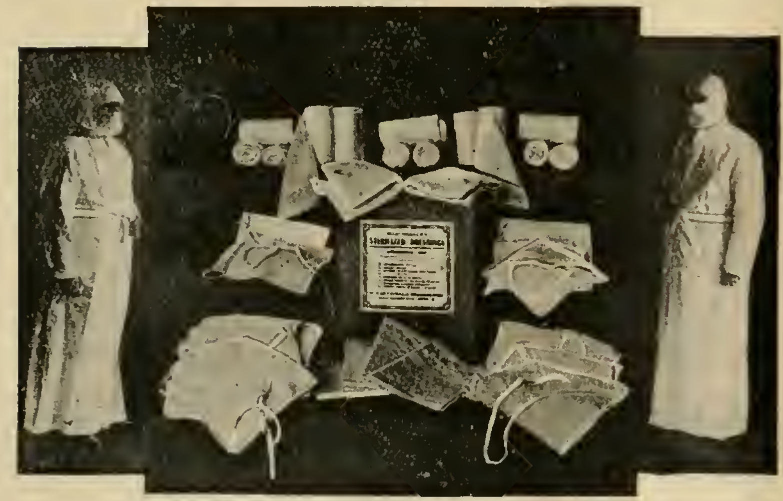


Fig. 1.—The Set of Surgical Dressings, etc.

The chief feature is that the contents of the tin being absolutely dry and hermetically sealed, they can be kept for any length of time, so that the surgeon can always have one or more sets at hand for use in an emergency. I have used these dressings for ten years for operations of all kinds, and I have not had any reason to suspect their being absolutely sterile—as, indeed, is to be expected from the mode of their preparation. The swabs in use at the Hampstead Hospital for abdominal operations are similar to those shown in the above illustration.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

AUSTRIA.

Vienna, Sept. 20th, 1913.

The subject of

Hydatid Moles

has been made the subject of very exhaustive discussion in the medical journals of Vienna, by Dr. Th. Kropiwriscki, of the Universitäts-Frauenklinik, Breslau. He prefaces his account of a long and interesting series of cases which came under his own observation with a sketch of the literary history of the subject, and gives afterwards a full *précis* of the existing knowledge of what long proved one of the mysterious problems of gynæcological pathology.

The term *mola* has descended to us from the Father of Medicine himself, through the intermediate linkage of Aristotle and Galen. But definite ideas on the subject of the present thesis are of quite modern growth, indeed. It took more than 2,000 years, from the date of the vague reference of Hippocrates, and the more definite indications of his junior contemporary, Diocles of Carystos, to arrive at the scientific pathological views of Virchow—which were curiously foreshadowed by the latter Greek observer. Erotianus, who wrote a commentary on Hippocrates in the time of Nero, had made suggestions regarding the genetic presence of degenerate chorionic villi which were misinterpreted by subsequent medical writers, and thus allowed to pass into oblivion. The Arabs, as representatives of the apostolic succession in medicine, extended the application of the term *mola* to all uterine tumours, inclusive of those of the walls of the matrix. In the recognised works on medical history too much credit is given to Schenk of Gräpenberg, for the original description of the hydatid mole. He appears, indeed, to have been the first to employ the term *mola aquea;* but in his description he evidently confuses this with other uterine tumours. The oldest genuine description of the hydatid mole that has descended to us is certainly that of Ætius of Amida, who occupied a distinguished position at the Court of Justinian in the early part of the fifth century. He also gave a fairly accurate account of the symptoms, and pointed out the frequency of the coincident presence of œdema. The fact of occasional coincidence with the condition of hydrops uteri leads us to suspect that Ætius sometimes confused this and other conditions of profuse watery discharge with the genuine mole.

Christopherus a Vega and Valleriola recorded their respective observations; and, a few years later, Ludovicus Mercatus, Physician-in-Chief to Philip II. of Spain, gave a brief account of the mole in his great work, "De Morbis Mulierum Communibus." In 1618, Carolus Piso referred the origin of the mole to "semen infecundum et crudum." Nicolas Tulpius followed with a description of two cases in his "Observationes Medicæ," under the heading of "Hydrops Uteri"—with the added comment that some called such "mola aquosa." Vallisnerius published an illustrated description in 1690, and formulated (in a letter to Malpighi) the view that hydatid moles originated from the placenta. Malpighi discussed the subject further in his own works, and indicated that the mass of the hydatids in molar pregnancy was referrable to the position of the chorion. Nearly at the same time, Ruysch published illustrated accounts of such cases, in which usually the whole—and in one instance a portion—of the originally normal placenta had been changed into masses of watery vesicles. After this date, a continued series of descriptions may be found, some of clearly recognisable hydatid moles, and others of cases of more or less obscurely similar nature.

The use of the microscope came at last to shed a new light on the dark ways of the hydatid mole. With the knowledge of the normal histological structure of the chorion and its villi came the ability to trace their pathological changes, and we can now readily recognise the insuperable difficulties which faced the older authors. But even in quite modern times the question was discussed: Was the mole a product of conception or not? For examples in Gluge's "Atlas of Pathological Anatomy" we find the venerable views of the helminthologists reproduced: that the hydatid moles were genuine entozoa, or actual bladder worms. Two prominent French authorities adhered to this view—Pereyard and Cloquet—who thought that they had observed spontaneous movements of the individual vesicles and noted their occurrence in a virgin. Bremser, in his discussion of Hydrometra hydatica, came to the conclusion that the hydatids were really structures which had each existence of its own, although his conceptions thereof seem hardly definite. Velpeau recognised that in the degenerate villi there were often no vessels; many were solid at first, and underwent branching growth which afterwards shrivelled, but in the case of hydatid mole persisted and underwent further development. H. Müller referred their source to the epithelial layer which underwent thickening, and became hollow only after the inner surface had become lined with a fibrous membrane—the so-called endochorion. Gierse and Meckel located their origin in the central cellular tissue of the villi, which, instead of continuing in the normal solid state, formed central spaces of various sizes, filled with serum, and crossed by a delicate network of fibres. This view was re-examined and completed by Virchow, and was thenceforward adopted by most authors. Marchand, however, advocated the conception that the genesis lay in a dropsical swelling of the connective tissue of the villi; and the deservedly prevailing view at present is that, in the formation of the hydatid mole, a more or less considerable proliferation of the cell-layers and the synzytium takes place, and that the products—especially in the latter—undergo degenerative changes, whereby the stroma in the central portions undergoes dropsical changes on account of incomplete nutrition. Hecker adopted the view of a primary defect of the allantois being the cause of the proliferation of the chorionic villi, but failed to explain thereby the presence of the villi and the vessels which are often present. Other writers would refer the ætiology to the relationship between mother and fœtus, and suggest syphilis as a cause; which was, however, demonstrable in but few of their cases. Keifer would associate hydatid moles with the use of diaphoretic agents, especially sodium salicylate, from his own observations of five cases. Such general diseases as chlorosis, anæmia, and nephritis appear to predispose, also disorders of menstruation. Most recent is Gottschalk's contribution to the ætiology, advanced on the basis of two cases observed by himself, that the growth of a typical hydatid mole, with vesicles of dimensions up to that of a hazel nut, may take place without having progressive epithelial proliferation, and that this process can have no genetic significance in the association. From all those hypotheses which have a scientific basis in observed facts we may come to the conclusion that the hydatid mole has already been formed and ready-made before any increased activity of the chorionic epithelium intervenes; the latter first comes in with the failure of the fœtal circulation in the molar mass, and only after destruction of the capsularis, which results from pressure-erosion, from the copious bathing of the already degenerate villi with maternal blood within the decidua, does the epithelium of the villi display the effects of excessive nutrition.

"How to Take Care of Baby" is the title of a little pamphlet by Dr. Selina F. Fox, which is published at 1d. by the Women's Industrial Council, 7 John Street, W.C. It gives some useful advice as to the management of infants in a cheap and handy form, and will no doubt find a ready sale.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

The Spread of Anthrax.

Dr. Watt, County Medical Officer of Health, Aberdeen, submitted a report to the County Council, under the Contagious Diseases of Animals Act, dealing with the case of an employee who a short time ago had contracted anthrax. Dr. Watt said that the man had a pimple on his forehead, and whilst following his occupation in working amongst some bags of bone meal his cap fell over his face, and in attempting to replace the cap he scratched the pimple, which commenced to bleed. In the course of a few days his face became swollen, and he went to a medical man, who recognised the disease and sent the man to the Infirmary, where he was operated upon and made a complete recovery. The bones which the man was working amongst probably came from Bombay, but he also stated that he was working amongst other bags, the contents of which might have come from any quarter of the globe.

The Chairman remarked that this case showed the danger of foreign bone manures, and he moved that the case should be reported to the Board of Agriculture, along with a statement pointing out that it supported the contention of the Committee that these bones should be sterilised.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents]

FRENCH DRAINS AND MALODOROUS FRANCE.

To the Editor of The Medical Press and Circular.

Sir,—I am not a doctor. I rarely see a medical paper. I am indebted to my friend "Anglo-Français" for the copy of your valuable journal of September 10th, which contains his letter under the above heading. I have lived long enough in France to have become more than sufficiently alive to the monetary loss the country sustains annually owing to the lack of public hygiene. Although not totally dissociated from trade, I am not a member of any British Chamber of Commerce over here. If I were, I would certainly feel inclined, as my friend suggests, to bring the question forward. This would give it the best chance of gaining further attention. The subject is avoided by French, and rarely referred to in English newspapers. Living a few miles outside the fortifications in an open, park-like space on the verge of the Forest of Vincennes, I have been able to keep a house with a garden where I can so far ensure my own sanitary safety. This is impossible within the city of Paris. The sanitary defects of the houses, with rare exceptions, are those described in your pages, whilst the water offers an especial danger. Every now and again it becomes of more than doubtful purity. It used to be common for the authorities to issue a periodical warning and advise the boiling of all drinking water. This is difficult in domestic life. It does not do away with the risk of typhoid infection through milk and other food materials that may have been treated with polluted water. Typhoid fever is, I believe, in Paris and other towns more apt to attack healthy young English people than natives. The latter seem immune from long contact with infection. I have a record of too many cases of typhoid among my British friends and acquaintances living in Paris and in Provincial French towns, whilst the cases of frequent sore throats and chronic lowered health have been very numerous. People who have so suffered go away and spread the facts. Those compelled to sojourn in France do all they can to dissuade others from getting into a similar position. I have just returned from a motor tour with friends—an Englishman and wife and their eighteen-year-old daughter. We have visited extremely attractive and picturesque towns, and have sometimes stayed at purely French hotels seldom visited by foreigners. It must be said that in the matter of water closets at least a considerable improvement has been brought about through the influence of the Automobile Club in hotels frequented by its wealthy members. In other hotels, in this and other sanitary directions the conditions remain, as a rule, truly shocking. For example, the last hotel we stayed at was a most picturesque building in a cathedral town not far from the main Paris-Calais route. It was an old posting house, probably of much older foundation. The central court from which the chaises used to start was glazed over and imperfectly ventilated. Out of this led the staircase to the bedrooms. This was very ancient, with small closed windows. In the corners, shut off by wooden partitions, on the landing and at the ends of the corridor, were the closets. The light and ventilation both came in over the partitions; there were no windows; that is to say, the closets in fact ventilated into the bedrooms, the doors of which formed the chief line of escape for the foul gases. The whole hotel was pervaded by a sickly odour. It made one's gorge rise, and effectually destroyed all relish for the super-excellent food cooked under the supervision of the landlord, himself a chef. I knew it was of no use, but my friend before our hastened departure on the second day spoke on the subject to the landlady. She merely smiled and shrugged her shoulders. She evidently felt that being prosperous and not urgently needing the custom of "*ces Anglais,*" she was not called upon to incur the great outlay which attention to their requirement would involve. My friends, like thousands of other tourists year by year, have gone home to tell these tales to their neighbour—a very bad thing for France from the business point of view. I say nothing about patriotic or other considerations dwelt upon by your correspondents. I beg for the British privilege of concealing my name (when not demanded), and subscribe myself,

Yours truly,
M. B. J.

Fontenay-sous-Bois, Seine.
September 18th, 1913.

To the Editor of The Medical Press and Circular.

Sir,—The strictures of your correspondent on hotel sanitation in France apply with even greater force to the caravanserais of Italy, as I can vouch—unhappily to my cost. Although not a medical man myself, I have a brother and two nephews in the profession, and I take great interest in medical affairs as an educationalist, and rarely fail to read the Medical Press and Circular at my club. In discussing this important subject, one must admit that in most of the leading hotels in Paris, along the French Riviera, and in all the famed health resorts of France, sanitation has made great strides during the last few years and is well nigh perfect, much of it having been carried out by English specialists. The filthiness, apart from its attendant dangers to health, of the old system of water-closets causes an involuntary shudder when one remembers, as I have reason to do, what it was forty years ago. But it is still as abominable in some of the Italian hotels which I visited in the early part of the present year; and the complaint of your correspondent—which, according to my experience, would be exceptional in these days in France—becomes the common lot of unfortunate travellers in beautiful Italy. Of course, I could readily name certain hotels whose proprietors have put their houses in order and are reaping the just reward of their enterprise, but it is with the hope of stimulating to immediate action other centres through which so many English tourists and patients pass in search of health and recreation that I make my criticism of the country at large. These hoteliers have been warned, sometimes at the cost of a life through the obnoxious drainage, and it needs but the constant exposure in leading medical journals to compel, what should not need exhortation—the protection of life and health by them.

I am, Sir, yours truly,
A Member.

Travellers' Club.
September 20th, 1913.

MEDICAL MEN AS DENTISTS.

To the Editor of The Medical Press and Circular.

Sir,—Too many medical men are unaware of the fact that by virtue of being registered medical practitioners they are entitled, under Section 3 of the Dentists Act of 1878, to use the title "dentist."

The current "Educational Numbers"—Medical and Dental—announce that "In addition to the longer courses of hospital [dental] attendance, courses of six months' duration will be given to surgeons about to join the Army and Navy, or to practise in the Colonies or remote districts." I would suggest, Sir, that if a sufficient number of the 41,587 registered medical practitioners are encouraged to take a "six months' course," as they are invited to do by the official educational institutions, such proceeding would materially assist in lessening the wail that there are only a few thousand dentists to meet the demand of "20 millions" of mouths requiring attention in the United Kingdom. Or it might help the Chancellor of the Exchequer, who is "deeply interested" in the subject (*vide* your reference to the matter in your comment *re* "Panel Dentists" in last week's journal).

I am, Sir, yours truly,
Myles Keogh,
Registered Medical Practitioner.

Dublin,
September 17th, 1913.

[It is, of course, well known that medical men have a right to practice any branch of surgery they choose. To practice dentistry efficiently, we believe that much more than six months' special study is required—Ed. M.P. and C.]

PANEL DENTISTS.

To the Editor of The Medical Press and Circular.

Sir,—Is there not some mistake in your annotation under this heading in your issue of September 10th?

After your often-repeated and amply-justified remarks anent unregistered dental practice, I find it difficult to understand your reference to a meeting of advertising and unregistered persons practising dental surgery. I fancy you must have intended to write "British Dental Association" in place of "Incorporated Dental Society." Surely you do not wish to suggest that the members of this body of unqualified persons should be placed one and all upon the suggested dental panel.

I enclose my card, and am

Yours truly,
M.R.C.S.Eng.

London.
September 13th, 1913.

[The writer of the article was unfortunately misinformed as to the nature of the Society in question. It would be disastrous to the future of the National Insurance Act were any branch of unqualified medical practice to secure recognition in any shape or form.—Ed M.P. and C.]

"A NEW REMEDY FOR ALOPECIA AREATA."

To the Editor of The Medical Press and Circular.

Sir,—In the leaderette headed "A New Remedy for Alopecia Areata," which appeared in your issue for August the 20th, you mention the success that Dr. Whitfield has obtained by correcting errors of astigmatism in this complaint. If my memory does not mislead me I believe this is not the first time that a connection between the two has been announced.

You further ask how the fact of an uncorrected error of refraction can affect the nutrition of the scalp. The explanation, I think, lies in the determination of the necessary nervous trophic influence, determining the nutrition of the scalp being starved, owing to the need for all the spare nervous output being required to "run" the ciliary nerves and ciliary muscles of the eyes. That the nerve supply can be diverted to the eye away from its proper "routes" is commonly seen in ophthalmic practice. I remember a severe and progressive case of ptosis, which completely cleared up by correcting the strain on the superior rectus of the same eye. In this case the energy ran down the one branch of the superior division of the third nerve, that to the superior rectus, whilst it neglected that to the levator palpebræ.

The mention of scalp affections reminds me of the case of a clergyman who complained that whenever he preached he felt an acute pain on the very top of his head. He considered it a "nervy" symptom arising from the excitement of preaching. The cause was more probably neuralgia from nerve starvation, as he became entirely freed when his fairly high degree of long-sighted astigmatism was corrected.

Such cases tend to prove how impossible it is to "beat the boundaries" of the effects which *unconscious* eye strain can and do produce.

I am, Sir, yours truly,
A. A. Bradburne, L.R.C.S.Ed.
30 St. Anns' Street, Manchester.

[If our correspondent refers again to the paragraph he will find it expressly states that a host of diverse diseases have been attributed to errors of refraction. The association of alopecia areata with that kind of defect is by no means a new observation. Whether it is concerned as cause and effect has not been established or otherwise; in other words, it remains a theory.—Ed. M.P. and C.]

ENGLISH RAILWAY SANITATION.

To the Editor of The Medical Press and Circular.

Sir,—The letter of "Anglo-Indian" in your issue of the 10th renders a valuable public service in drawing attention to the deplorably backward state of what may be briefly described as "railway sanitation." I trust some of your correspondents will furnish us with the legal aspect of the case. It is to me inconceivable that a medical officer of health should not be able to visit and control the sanitation of any railway in his district. The vagaries of British law, however, are too notorious to make one certain of anything except its uncertainty. I once saw a station in which only one of several closets was availtble (a penny-in-the-slot opening): the door was permanently open, the water flush absent, and the pan choked to the top with excreta. It is open to question, by the way, whether the railway company is not bound by law to furnish closet accommodation to passengers free of cost. The subject deserves to be thoroughly threshed out in the interests of the travelling public.

I am, Sir, yours truly,
Viator.

Surbiton.
September 20th, 1913.

OBITUARY.

DR. G. P. TENNENT, OF GLASGOW.

We regret to announce the death of Dr. Gavin Paterson Tennent, who died on the 13th inst., at 159 Bath Street, Glasgow, aged 67. The deceased, who was one of the best-known physicians in Glasgow, qualified M.B., C.M. in 1867, becoming M.D. in 1870 and F.F.P.S.Glasg. in 1875. After holding various resident hospital posts in Glasgow he assisted the Professor of Materia Medica—the late Dr. J. B. Cowan—and during these twelve years he frequently fulfilled all the duties of the Chair during the enforced absence of the Professor owing to illness. In 1874 he was appointed Physician to the University Lying-in Hospital and the Dispensary for Diseases of Women, and in the same year, when the Western Infirmary was opened, he became Physician to the Dispensary. When the Freeland wing of the infirmary was completed in 1881, Dr. Tennent was elected a full physician in charge of wards, and he continued in office till 1896, when he resigned owing to the increasing demands made upon his time by the claims of his consulting practice. The directors, in order to mark their appreciation of his 22 years' service to the hospital, made him the first honorary consulting physician to the institution—an honour of which he was justly proud. Dr. Tennent possessed in an exceptional degree the power of inspiring confidence in his patients, and the public will remember him as one of its most trusted consultants. Yet it must not be forgotten that both in the University and in the wards of the Western Infirmary he was a most successful teacher. He attracted students by his earnestness and thoroughness. His lectures were always carefully prepared, and were marked by rare clinical insight.

As a man Dr. Tennent was large-hearted and generous, and he performed numerous benevolent actions of which no one will ever know the full extent. He may truly be said to have lived for his work, and consequently he found little time for social and other recreations. He was, however, very fond of travelling, and spent most of his summer holidays abroad. Dr. Tennent was unmarried, and was the last surviving member of his own immediate family. His death has removed one of the most prominent and highly respected members of the medical profession.

DR. F. W. FORBES ROSS.

The death occurred on the 18th inst. of Dr. Frederick William Forbes Ross, M.D., F.R.C.S., of New Cavendish Street, W. The deceased was educated at the University and the Royal College of Surgeons at Edinburgh, and at University College and Middlesex Hospitals, London, and was a gold medallist and senior prizeman in the subject of anatomy at the Royal College of Surgeons, Edinburgh. In 1893 he obtained the M.D. degree at Edinburgh with honours, while ten years later he became F.R.C.S.Eng. He was also D.P.H., R.C.P.S.Lond. Dr. Forbes Ross was formerly a civil surgeon to the London Guards' Hospital, surgeon to the Kensington General Hospital, and had also held surgical appointments at the Samaritan Hospital, North London Hospital for Consumption, and the Children's Hospital, Paddington. His contributions to medical literature were many, and the subjects varied, and he was the inventor of several useful surgical instruments and appliances. These included a safe blunt hook and crotchet, an inhaler for the continuous administration of oxygen, a "traveller" for opening deep-seated liver and other abscesses, and a retainable bull-dog crushing clamp for a solitary hæmorrhoid.

DR. E. J. NIX.

We regret to announce the death of Dr. Edward James Nix, of Weymouth Street, London, W., who died on the 11th inst., aged 69. Dr. Nix, who studied at Charing Cross Hospital, qualified as L.R.C.P.Edin. and L.S.A.Lond. in 1872, became L.R.C.S.Edin. in 1874, and M.D.Brux. in 1877. He was well known as a medical practitioner in the West End, being Physician to the All Saints' Children's Hospital, Margaret Street, and to the St. Elizabeth's Home for Incurables, Mortimer Street. He was formerly a member of the Council of the Medical Society of London, Vice-President of the Medical Defence Union, and President of the Brussels Medical Graduates' Association. He was also a Fellow of the Royal Society of Medicine and a Vice-President of the Medical Society of London.

DR. DUNCAN McCALLUM.

The death occurred, in the Western Infirmary, Glasgow, after a somewhat protracted illness, of Dr. Duncan McCallum, the esteemed Medical Officer of Tarbolton and Annbank. Dr. McCallum was in his 45th year, and was a native of the parish of Morvern, Argyllshire, and previous to taking up his residence in Ayrshire he was the Medical Officer for the united parish of Pennygown and Torosay, Isle of Mull. In Tarbolton he built up a large and successful practice, and in addition held several important public appointments, the duties of which he discharged with skill and untiring energy. He was a graduate of Glasgow University, and devoted a considerable amount of his time to diseases of the ear, having obtained practical instruction at Guy's Hospital.

Dr. McCallum, in addition to his medical duties, took the greatest interest in the breeding of Highland ponies, and was a recognised authority on horses, and in cattle shows his decision as a judge of horses always met with unanimous approval, both of farmers and horse breeders. Dr. McCallum is survived by a widow and young family.

NEW PREPARATIONS.

"KEPLER" MALT EXTRACT WITH GLYCEROPHOSPHATES.

We have received a sample of the well-known "Kepler" Malt Extract with Glycerophosphates issued by Messrs. Burroughs Wellcome and Co. Each fluid ounce contains .4 gr. of calcium glycerophosphate, and of potassium, sodium and magnesium 2 gr. each. For these "Kepler" malt extract forms an appropriate and palatable vehicle, having as well a definite food value of its own. This preparation has been found beneficial in enfeebled conditions of the nervous system from exhaustion, as well as in such apparently diverse conditions as anæmia, urticaria, and incontinence of urine. In osteo-malacia and rickets the calcium salt is valuable, and in the treatment of epilepsy by means of a salt-free diet, the administration of glycerophosphates, in conjunction with bromide, is strongly recommended by authorities. In this elegant preparation the glycerophosphates are presented in an agreeable medium, which is itself an easily assimilable nutrient, claimed to be capable of aiding amylaceous digestion. To this extent the therapeutic value of the glycerophosphates is considered to be enhanced.

MEDICAL NEWS IN BRIEF.

Enteritis at an Infirmary.

The Public Health Committee of the Camberwell Borough Council have had under consideration the outbreak of enteritis among the children in Southwark Infirmary, East Dulwich Grove, which is near a railway siding where the Council deposit their dust and refuse for removal to trucks. In a report presented to the Committee, Dr. Francis Stevens, the Medical Officer of Health, states he has been in the neighbourhood of the siding in all conditions of wind and weather and has never noticed any nuisance, neither has he received any complaints, except in February, 1906, of an accumulation of rubbish before May this year. The reloading of the dust was carried on within a short distance of the houses in Melbourne Grove, the platform of East Dulwich Station, and a much-used omnibus and tramway route on one side, and on the other side of the station was Constance Road Workhouse. He pointed out that a return showed that when there was much enteritis in Southwark Infirmary there was always a considerable number of cases elsewhere in the borough. He asked the committee to bear in mind that because the handling of dust takes place near an institution where children have been attacked by enteritis, it is by no means necessarily a case of cause and effect. There were many other factors to be weighed and excluded before they could accept what was on the evidence supplied nothing but theory.

The Public Health Committee endorsed Dr. Stevens's opinion that the deaths in Southwark Infirmary were not attributable to the causes assigned. They were of opinion that every precaution was taken to prevent any nuisance arising from the removal of dust at the siding, and also drew attention to the fact that the removal of manure was a private matter, and in the hands of the railway company as common carriers. In view of the unjustifiable attacks made upon the Council, they recommended that the Local Government Board be asked to hold a public inquiry into the whole matter. The letter of the Local Government Board suggesting that the Council should discontinue the use of the siding for the loading of refuse has been considered by the Works Committee. They report that they have given instructions for every possible care to be taken in the handling of the refuse, and have requested the railway company to ensure that all loaded trucks are removed each night as usual.

Pictures for London Hospitals.

Mr. Otto Gutekunst, senior partner in the firm of Messrs. P. and D. Colnaghi and Obach, has recently presented to King Edward's Hospital Fund for distribution to hospitals about 300 fine and artistic enengravings by and after great old and modern masters which he had framed for the purpose. The pictures have been distributed by the fund amongst the larger London Hospitals and, to judge from the letters of thanks which have been received, Mr. Gutekunst's gift is very highly appreciated.

Death of a Famous Surgeon.

From Lyons comes the news of the death, at the age of 67, of Professor Antonin Poncet, the famous surgeon, who was one of the most remarkable figures in French scientific circles. Professor Poncet saw the assination of President Carnot at Lyons by Caserio in 1894, and took the great responsibility of attempting to save Carnot by performing a vital operation. Without using chloroform, for the wounded man was greatly enfeebled by the hæmorrhage, he made an incision and tried to check the flow of blood which poured from a huge wound in the liver. The attempt was unfortunately in vain. Apart from his actual surgical work, Professor Poncet won fame through his curious historical researches and studies on the illnesses from which Napoléon, Richelieu, Rousseau, and other great men suffered.

Assault on a Medical Man.

Dr. H. P. Jelley, of Hackney, well known as the "threepenny doctor," was the complainant in a case that was heard last week before Mr. d'Eyncourt at North London Police Court, in which William Lambert (38), billposter, and Frederick George Ford (46), porter, were charged with having damaged Dr. Jelley's premises at 172 High Street, Homerton, Lambert was also charged with assaulting William Daymon, a motor-bus driver, and Dr. Jelley.

It was stated by Dr. Jelley that on Wednesday night he heard a scuffle and ran out, and saw Lambert strike one of his patients in the jaw and knock him down. The prisoners were sticking bills on the witness's window. When the witness stated that he would take the address from the bill Lambert seized him by the neck and tried to throttle him.

Mr. d'Eyncourt: Are you a qualified doctor?

Dr. Jelley: Yes.

Lambert denied that he tried to throttle the doctor.

Mr. d'Eyncourt: The marks of your fingers are still on his collar.

Lambert: He wants a new collar. (Laughter.)

Mr. d'Eyncourt stated that there was no doubt that the bill had been taken out to post on Dr. Jelley's premises. Ford was fined 5s. and 10s., and Lambert was ordered to pay 10s. and 30s. costs.

Alleged Infirmary Scandal at Brentford.

It is reported that at a meeting of the Brentford Guardians last week, conditions of certain wards in the Infirmary were reported which, in the words of a medical man, were calculated to "manufacture disease."

Col. Carr Calthorpe said that owing to the want of adequate accommodation many duties in the Union Infirmary which should be performed in private had to be performed in the presence of other patients. He gave a very unpleasant description of the conditions, concluding:—"This is no fancy picture, but a plain statement of facts as they existed in June." He also quoted a letter in which Dr. Williams, Chairman of the Infirmary Committee, is alleged to have admitted that all kinds of septic conditions from throat and blood poisoning were treated in the general wards, and that patients were lying cheek by jowl to the danger of the ordinary cases. The possible consequences, he added, were something too terrible to contemplate.

It was decided that the Infirmary Committee should confer with the medical staff, in order to improve the isolation of infectious cases and the segregation of severe surgical cases.

Dr. Williams said that the Committee had to administer the infirmary as provided by the Board. The infirmary was a magnificent building, but was so absolutely lacking in the essentials for the treatment and care of the diseased that the diseases could not be satisfactorily dealt with, and instead of curing disease the conditions positively manufactured disease, owing to the lack of means of segregation.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Miners' Nystagmus.—Pollock (*Glasgow Med. Journ.*, September, 1913) gives an interesting account of the case of a patient who suffered from miners' neurosis, and who came under observation before the nystagmus was fully developed. Three such cases had been demonstrated at the Oxford Ophthalmological Congress last summer, and the question was discussed whether the disease can be present without the nystagmus. Hemeralopia, night blindness, and photophobia were severe in these cases without nystagmus. Twitching of the lids was present in each case, and one had nodding of the head, and another had twitching of the neck muscles. Butler, who showed the patients, considered that the muscular twitching and tremor were the essential symptoms in the cases. Pollock's patient had been a mine manager for some years, during which time he was constantly in the pits. He complained of severe vertigo, of being dazzled by lights, and of staggering when in the street after dark. He also complained of hemeralopia. The vertigo came on at all times, but especially on coming into the light. Careful search failed to elicit any nystagmus and the optic nerves were normal. Pollock considers that while the question as to whether the disease can occur without nystagmus must still remain open, yet that there must be a stage of the disease prior to the development of the nystagmus, and it is of the greatest importance that the disease should be recognised in this stage. The symptoms presented by the patients whose cases have been recorded are almost entirely subjective, and it is difficult therefore to accept these cases as coal miners' neurosis. Pollock's patient, however, had no suspicion that his condition was associated with a coal mine, and he could not have had the slightest advantage in considering that he was suffering from such a condition. On the whole matter Pollock comes to the following conclusions:—The absence of light is the chief factor in the causation of miners' nystagmus. Coal gas, hydrocarbons from the lamps, and astigmatism are probably secondary agents. The myopathic theory of the late Simeon Snell has now been abandoned. Nystagmus is the most important, but not the only symptom in a complex neurosis. Three cases have been published, and to these a fourth is added of the disease occurring without nystagmus. The opinion is advanced that these cases represent the stage prior to the development of nystagmus. Evidence is brought forward in support of the view, published five years ago, that the lesion is situated in the cerebral centres, most probably in the nucleus of the third and associated nerves.
K.

Local Anæsthesia for the Nose and Throat.—Davis (*Post-Graduate*, August, 1913) discusses this subject and comes to the following conclusions:—Successful local anæsthesia depends not only upon the drugs employed, but the method of application. Where mucous membranes are concerned, and cocain-adrenalin is applied superficially, the secret of safety and efficiency is in having the surfaces clean and dry, in using a small amount of a saturated solution, and immediately before and after operative procedures douching the parts with warm, sterile, normal salt solution. K.

Hair-Ball in the Stomach.—Hood and Ritchie (*R.A.M.C. Journ.*, September, 1913) record the case of a girl of seven years of age who was admitted to hospital on account of acute abdominal pain and constipation. The parents stated that the child had always had a "weak stomach," and four and a half years ago her mother had noticed that she had developed an abnormal appetite, eating almost anything she could lay her hands on, such as pieces of string, tags of blankets, and large amounts of her own hair. This abnormal appetite had, to the best of the mother's belief, disappeared, and for over two years nothing abnormal had been seen in the child's stools. Up to within a week of her admission to hospital the child appeared well and took her food regularly, but since that time she would eat nothing. On examination of the abdomen, an ill-defined tumour could be felt in the epigastric region. The diagnosis of hair-ball was made, and this was proved to be correct by subsequent operation. The child made a good recovery. K.

Urinary Antisepsis.—Jordan (*Brit. Med. Journ.*, September 13th, 1913) reports the results of his investigations on the value as urinary antiseptics of (1) hexamethylinetetramine and its derivatives (urotropin, helmitol, cystopurin, etc.), (2) sandalwood oil, (3) salicylic and benzoic acids, (4) boric acid, (5) uva ursi and arbutin. He grows the organisms in the urine itself, comparing their behavious in urine after taking the drugs to that in normal urine. The effect of acidity and alkalinity of the urine on bacterial growth was tested by taking acid sodium phosphate (NaH_2PO_4) and potassium citrate (Na_2HCO_3) respectively by the mouth. Staphylococci grow more readily in alkaline urine. In spite of what is said to the contrary, B. coli grow almost as well in alkaline as in acid urine. Hexamethylinetetramine is not itself antiseptic, but acts by producing formaldehyde in the urine; this only takes place in acid urine, the drug being inert in alkaline urine. The degree of antiseptic power is proportionate to the acidity, and where this is normal or higher the drug is far the most efficient of all urinary antiseptics. There is no evidence that helmitol, utramine, hetraline and cystopurin behave differently in the urine, though they do in the test tube. Sandalwood oil is a bad general antiseptic, but appears to have a specific action on streptococci, which may apply to cocci generally. It is of some use in alkaline urine. Benzoic and salicylic acids are very similar in action. Both are fairly efficient antiseptics in urine, but are of little use in alkaline urine. Boric acid is an efficient antiseptic. Its action is unaffected by alkalinity, so that it is the most efficient drug in the case of alkaline urines that we possess. Uva ursi is quite a good antiseptic. The writer draws the following practical deductions from his investigation:—(1) The use of urotropin (together with acid sodium phosphate, which should always be given with it) as a prophylactic before any operation or procedure where the urine may become affected is of the utmost value, since if the urine is clean and highly acid, and sufficient urotropin is given in small doses to keep it constantly present, the urine will not support the life of any organism. (2) Urotropin should only be given when the urine is, or can be made acid, otherwise it is inert. It should never be given with potassium citrate in B. coli infections. (3) Where the urine is undergoing ammoniacal fermentation in the bladder, bladder washes, or some operative procedure, will always be the most important part of the treatment. The best drugs to use are boric acid in large doses, uva ursi, and possibly sandalwood oil. (4) Sandalwood oil is always worth trying in a cystitis due to streptococcus alone. (5) When prescribing acid sodium phosphate, it is well to write the chemical formula (NaH_2PO_4) to avoid dispensing mistakes, and to remember that high acidity of the urine is more efficacious than large doses of urotropin.
S.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

P. S. (Acton).—The composition of the atmosphere varies within certain limits. The three chief constituents are oxygen, nitrogen and argon. In the light of modern science we must also add helium, neon, krypton and xenon. Further, there are varying quantities of aqueous vapour, carbon dioxide, hydrogen dioxide, ammonia, and ozone, as well as hydrogen sulphide, organic and inorganic particles of various kinds floating in suspension.

TRANSPARENT ZOOLOGICAL AND ANATOMICAL SPECIMENS.

Visitors to the Museum of the International Congress of Medicine (Department of Museum Technique) could hardly fail to be impressed with the striking results obtained by Prof. W. Spalteholz, of Leipsig, for showing the skeleton, muscles and viscera through the skin of anatomical and zoological specimens, "as in a good skiagraph." The importance of the method for scientific investigation is evident. The study of the centres of ossification is rendered quite easy and the minutest ramifications of the bloodvessels can be readily followed. The specimens can be prepared to show all that a perfect X-ray photograph can show and more, because they reveal the details of structure of the various organs and the plastic effect of their relations. We understand that the patent for the method has been lately acquired by the Odol Chemical Works, 59-63 Park Street, Southwark, S.E. The process should be one of great interest to all curators of pathological museums, as well as to students of anatomy and pathology.

Dr. R. T. (Suffolk).—An inebriate retreat must be licensed by the county or borough within which it is situated, and at present there are 19 of them at work, capable of accommodating 566. Every licensed retreat must have a medical officer attached thereto, and medical treatment, including the administration of drugs when necessary, is essential to the proper control of a retreat. Further information may be obtained from the Report of the Inspector under the Inebriates Acts, 1879 to 1900 for the year 1911, not long since issued.

F.R.C.S.Ed. (London, N.).—It has been shown, according to Dr. Frederick B. Power, that the wheat germ contains the following substances:—Choline, betaine, allantoin, cane sugar, dextrose and raffinose, in addition to sitosterol. The amount of fatty oil obtained in a recent investigation was equivalent to about 7 per cent. of the weight of the material employed.

Appointments.

Burke, M., M.B., B.Ch., R.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Skibbereen District of the county of Cork.

Challenor, Lionel, M.R.C.S., L.R.C.P.Lond., First House Surgeon of the Leicester Royal Infirmary.

Charles, S. F. A., M.D., B.Ch.Dub., Certifying Surgeon under the Factory and Workshop Acts for the Lisbellaw District of the county of Fermanagh.

Garvin, S., M.B., B.Ch.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Clonavaddy District of the county of Tyrone.

MacNaught, W. W., M.B., B.Ch.Glasg., Indoor House Surgeon at the Glasgow Maternity and Women's Hospital.

Murdoch, John, M.B., Ch.B.Glasg., F.R.C.S.Edin., One of the Medical Referees under the Workmen's Compensation Act, 1906, for the Sheriffdom of Fife and Kinross, to be attached more particularly to the Dunfermline with Kinross District.

Reid, D. W., L.R.C.P. and S.Edin., L.F.P.S.Glasg., Outdoor Surgeon to the Glasgow Maternity and Women's Hospital.

Ritchie, T. C., M.B., B.Ch.Edin., Indoor House Surgeon at the Glasgow Maternity and Women's Hospital.

Sharpe, C. G. Haye, M.B., Ch.B.Leeds., Ophthalmic Surgeon to the Luton Education Committee.

Wade, E. W., M.D., B.Ch.Dub., Certifying Surgeon under the Factory and Workshop Acts for the Harleston District of the county of Norfolk.

Vacancies.

Ayr District Asylum.—Junior Assistant Physician. Salary £140 per annum, with board, lodging, and laundry. Applications to Medical Superintendent.

The Hospital, Newark-upon-Trent.—Resident Medical Officer. Salary £100 per annum, with board, lodging, and laundry in the Hospital. Applications to Hy. Crampton, Secretary.

Kettering and District General Hospital.—Resident Medical Officer. Salary £100 per annum, with board, residence, etc. Applications to J. Stauyon, Hon. Secretary, 3 High Street, Kettering.

Hospital for Consumption and Diseases of the Chest, Brompton.—Resident Medical Officer Salary £200 per annum, with board and residence. Applications to the Secretary.

York Dispensary and Maternity Hospital.—Resident Medical Officer. Salary £140 per annum, with board, lodging, and attendance. Applications to Joseph Peters, Secretary, 4 New Street, York.

Liverpool Stanley Hospital.—Senior Resident Officer. Salary £125 per annum, with board, residence, and laundry. Applications to Frank White, Hon. Secretary.

Royal National Hospital for Consumption and Diseases of the Chest on the Separate Principle, Ventnor.—Assistant Resident Medical Officer. Salary £100 per annum, with board, lodging, washing allowance in the Hospital. Applications to the Secretary, 18, Buckingham Street, Strand, London, W.C.

Township of Manchester.—Assistant Medical Officer. Salary £110 per annum, with rations, furnished apartments, fire, light, washing, and attendance. Applications to J. Macdonald, Clerk to the Guardians, Poor-law Offices, New Bridge Street, Manchester.

Warrington Infirmary and Dispensary.—Junior House Surgeon. Salary £120 per annum, with furnished apartments, maintenance, and laundry. Applications to J. H. J. Hampson, Secretary.

Parish of St. Giles, Camberwell.—Assistant Medical Officer (Infirmary). Salary £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent of the Infirmary, Brunswick Square, Camberwell.

Births.

Broadbent.—On September 15th, at Muswell Hill, N., to Dr. and Mrs. Reginald Broadbent (*née* Annette Stanley)—a son.

Cawston.—On September 14th, at Brecon House, Wantage, the wife of A. E. Cawston, M.R.C.S., L.R.C.P., of a daughter.

Longstaff.—On September 15th, at Burley, New Forest, to Dr. and Mrs. T. G. Longstaff—a daughter.

Marriages.

Depree—Willey.—On September 16th, at the Cathedral, Exeter, Hubert Templer Depree, M.B., B C.Cantab., of 65 Portland Court, W., and Guy's Hospital, London, son of Alderman F. Templer Depree, J.P., and Mrs. Depree, "Newlands." Exeter, to Lilian May, eldest daughter of the late H. A. and Mrs. Willey, Pennsylvania Park, Exeter.

Foster—Seabrook.—On September 16th, at Brockworth Church, Gloucester, Dr. John J. Foster, of Churchdown, to Violet Maud, eldest daughter of Rev. J. H. and Mrs. Seabrook, of Brockworth Vicarage, Gloucester.

Porter—Cockell.—On September 16th, at St. Philip's Church, Dalston, Dr. James Houston Porter, of Queen's Road, Dalston, elder son of Mr. James Biggs Porter, of the Inner Temple, and Mrs. Porter, to Katie Marjorie, elder daughter of Dr. Frederick Edgar and Katie Cockell, of Holly Lodge, Forest Road, Dalston.

Deaths.

Graham.—On September 20th, Eleanor Parkhurst Graham, wife of Dr. Graham, of Kingsdon, Somerset, æt. 78.

Hutton.—At Harrow-on-the-Hill, suddenly, of heart failure, David Mount Hutton, M.D., of Birkdale, Lancashire, in his 44th year.

Phillips.—On September 10th, at Inverness Terrace, Bayswater, W., Dr. Alexander Phillips.

Murray.—On September 16th, at a nursing home in Newcastle, George Campbell Murray, L.R.C.P. and S.Edin., L.F.P.S.Glasg., of 37 The Avenue, Durham.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, OCTOBER 1, 1913. No. 14.

NOTES AND COMMENTS.

Southwark versus Camberwell.

THE Local Government Board has not so far intervened seriously in the dispute between the Southwark and the Camberwell Guardians. It will be remembered that some weeks since a number of deaths from enteritis were reported in the Southwark Infirmary. The outbreak was attributed by the Superintendent of the Institution to infection conveyed by flies from various railway trucks laden with refuse within a stone's throw of the Infirmary. The refuse belonged to the next parish, Camberwell, which has made light of the matter. The Local Government Board was appealed to, as it had been before the outbreak, but has done nothing more than write a few official letters and send an inspector to look into the facts. The Board has written to the Camberwell Guardians as follows:—"The Board are advised that the evidence does not suffice to show that the cases of enteritis, which have unfortunately occurred in the Infirmary belonging to the Guardians, were caused by the refuse, but the Inspector reports that the arrangements for dealing with the refuse are unsatisfactory and at times they give rise to nuisance. Having regard to the proximity of the Infirmary and other institutions, the Board suggest that the Borough Council should discontinue the use of this siding for the transhipment of refuse from the carts to railway trucks. The Board would be glad to learn at an early date what other arrangements have been made for dealing with the refuse."

There they are and there they remain.

THE tone of this official communication is delightful. The Camberwell Guardians have evidently appreciated its sweet reasonableness, for they have done nothing so far to store their rubbish away from their neighbours' Infirmary. We regret to say that their Medical Officer of Health has strengthened their hands by the following report in which Dr. F. Stevens, the Camberwell Medical Officer of Health, stated that the nearest point of any of the Infirmary wards to the dust-track siding was seventy yards; and the furthest distance that he has ever detected the slightest smell of dust to the leeward of the discharging carts is roughly about sixty to seventy yards, and that only when a very strong wind was blowing towards him, and dust disposal was in active progress. He further stated that when there was much enteritis in the St. Saviour's Infirmary there was always considerable prevalence elsewhere in other parts of the borough; that on the grass and young shoots of the bushes and small trees growing close to the Infirmary wall there was no evidence of dust; and that he had seen members of the staff sitting outside in the open air between the trucks and the Infirmary itself, apparently suffering no inconvenience. The Committee endorsed the opinion of Dr. Stevens that the deaths at the Southwark Infirmary were not attributable to the causes assigned, and, in view of the attacks made upon the authority, recommended that the Local Government Board be asked to hold a public inquiry into the whole matter. As regarded the foregoing report, it avoids the crucial point, namely, that the infection was alleged to have been carried by flies. There is scientific reason to believe that an outbreak of enteritis could be caused in that way. There are the flies, the refuse in the trucks, the outbreak and the deaths, and, we may add, there are the Local Government Board and the Camberwell and Southwark Borough Councils. How long is this farce to continue?

Dust Theory to be Sifted.

THE fallacy, if we may be allowed to say so, of the report of Dr. Stevens is that the dust was not carried far from the railway trucks, whereas infectious disease is due to invisible germs and not to visible dust. Moreover, his contention avoids the main issue raised by Southwark, namely, that the enteritis was due to contagion carried by flies. The Camberwell Medical Officer of Health, however, may have been misreported. Anyway, his Council, by 43 votes to 6, have given him a full opportunity of further investigation by the following resolution:—"That inasmuch as the Guardians of the Southwark Union have failed to prove to the satisfaction of the Local Government Board that the cases of enteritis among the children patients of their infirmary were caused by the refuse in the trucks at the East Dulwich station goods siding, this Council is of opinion that it is incumbent upon them as the public health authority of Camberwell to investigate thoroughly the whole of the circumstances connected with the matter with a view of discovering the real cause or causes of the outbreak and of recommending what future measures should be taken to prevent the occurrence of such epidemics in this and similar institutions situate in the borough, and that the Medical Officer of Health is instructed to carry out such investigation and empowered to call in any expert assistance he may deem necessary for the purposes of such investigation, and, further, that the Guardians of the Southwark Union be informed of the above resolution and asked to afford facilities for this investigation by supplying the Medical Officer of Health with all facts and figures bearing on the subject which their Medical Officer may possess, and that a copy of this resolution, together with the report of the Medical Officer of Health for Camberwell on the allegation of the Southwark Guardians, be forwarded to the Local Government Board."

LEADING ARTICLES.

THE FUTURE OF THE BRITISH MEDICAL ASSOCIATION.

AT a comparatively early stage of the dispute between the Government and the medical profession over the national insurance legislation, it was remarked in these columns that Mr. Lloyd George had split the profession from one end to the other. The full effect of that cleavage has been most acutely felt by our only great organisation, the British Medical Association. The dissensions within that body, both before and after the passage of the Act, were attended with demonstrations of extreme partisanship in a degree hitherto unknown to any large section of the profession. A sort of climax came with the acceptance of an important post on the Insurance Commission by Mr. Smith Whitaker, the Medical Secretary of the Association, and a number of resignations took place. It is generally understood that recently a sort of anti-climax has been reached by the reversal of the policy of the Association which officially declared the panel service to be derogatory to the profession and against the public interest. The second crisis, or sub-crisis, is said to have been accompanied by the tendering of a considerable number of resignations. It is the work of the anti-panel party in the profession, namely, those who adhering to the early policy of the Association set forth in the famous cardinal principles have declared war against the Act and its upholders. The hostility of this somewhat forlorn faction has been crystallised into a formula by the Wandsworth Division of the Association in the following resolutions:—"This meeting of the Wandsworth Division of the B.M.A. is of the opinion that the present pro-panel attitude of the Association is reacting detrimentally to the interests of the members of the profession in general and in particular to the interests of non-panel practitioners, and approves the action of all such members in resigning." This resolution was proposed by Mr. Edwin Smith, seconded by Dr. Barton, and carried by 21 to 14. Were a spirit of the kind denoted in such a declaration at all general the days of the Association might be looked upon as numbered. It is difficult to believe, however, that any large proportion of members will be found ready to subscribe to tactics that may be best described as unwise and disloyal; unwise because they are aimed at legislation which there is not the least prospect of revoking, and disloyal because it amounts to a deliberate and spiteful attempt to wreck an Association to which they belong. Such a resolution renders the resignation of its supporters a foregone conclusion. The retention, indeed, of members holding such views would endanger the existence of any association however necessary its purpose and strong its policy. It may be hoped, however, that the cabal is extreme in proportion to its numerical weakness and to the futility of its foolish partnership. That the British Medical Association has its defects is to say that it is still passing through early stages of its evolution. That it is the only great representative organisation yet possessed by the medical profession is equally true. In it lies the principle of democratic representative control, albeit overlain and obscured at times by the provisions of a cumbrous constitution. With the Association rests the present and future prosperity of generations of medical men, whose interests demand the protection that can alone be gained from a body that has virtually adopted the principles, if not the name, of trades unionism. The Association will doubtless emerge from the present crisis with added wisdom gained from recent experiences. That certain financial reforms and economies will be needed may be inferred from the proposal of the representatives at Brighton to raise the subscriptions to two pounds per annum. The Council will act wisely by taking members into its full confidence and by setting its face resolutely against that internal faction and cabal which have always been the bane of medical corporations. In an association like that under notice the Council should above all things endeavour to rule in accordance with the wishes and the interests of its main body of members, rather than to play the part of puppets in the hands of wire-pullers. Were an illustration needed, one need only revert to the melancholy spectacle afforded a few years ago when one of the highest officials of the Association ran deliberately counter to a warning notice printed week after week in the *Journal* against accepting posts in the Hampstead Hospital. Recriminations, however, will serve no better purpose than the wrecking tactics of the non-panel section. For the present it behoves every member of the British Medical Association to support the Council in their endeavour to tide over what appears to be a somewhat difficult situation, although, let us hope, not hazardous enough to justify the name of a "crisis." The loss of this great organisation would be irreparable, and it is unthinkable that because of their disapproval of a portion of the policy of the Council any considerable majority of members would tender their resignations. After all said and done, it should be remembered that representatives are elected by members, and are all, therefore, subject to removal from their representative position. The wisest course for members to pursue for some time to come is—to use an Americanism—to "sit tight" and possess their souls with patience for further developments.

THE ALLOCATION OF FUNDS FOR INSURED PERSONS NOT ON THE PANEL.

THE administration of so complicated an Act as that which deals with National Insurance was, humanely speaking, certain to be attended with various difficulties and anomalies. The idea of the accumulation of a vast sum of unallocated insurance money in the hands of the Commissioners, however, would hardly have presented itself to the most imaginative and far-seeing of Mr. Lloyd George's critics. That unexpected event has nevertheless happened in London, and its solution has a definite bearing on a similar problem in other parts of the Kingdom. In the metropolitan county there are some 1,488,000 insured persons, and out of these about 400,000 who on April 24th last had not selected the practitioners by whom they desired to be attended. Under the regulations made by the Insurance Commissioners they should have joined the panel by the middle of January, and, failing that, they were to be assigned to practitioners by local insurance committees. The latter step, however, was not taken, owing to the pressure of clerical and other work already thrown on the committees. The upshot of the matter is that in September there is still a small army of insured persons unattached to any particular panel, and for whose medical benefit the County of London Committee held in its hands at the end of the September quarter the large sum of £105,000. Various attempts have been made by the Council to solve the difficulty. Early in the year a circular was issued to insurance committees suggesting that, instead of allocating, say, John Brown and Mary Robinson to Doctor X, 14s. should be paid in respect of two persons not named and unknown to him, the persons in question being unaware that they, in their turn, had been assigned to Doctor X. The action thus suggested raised a doubt as to its legality in the minds of some members of the insurance committees. The matter was submitted to an eminent counsel, Mr. Danckwerts, K.C., who answered to the effect that the doctors on the panel had made a distinct contract for distinct persons and distinct fees, and the committee therefore had no right to hand over to them any money other than that for which they had contracted. The matter, of course, cannot be permitted to stand thus. In a discussion upon the point, Dr. H. H. Mills expressed his natural resentment against certain words used by Mr. Danckwerts, namely, "the committee is not entitled to make presents nor to distribute largesse amongst the panel doctors." Any suggestion of the sort is grotesque in view of the exacting nature of the services rendered and of the meagre remuneration tendered. The situation, however, must be faced. The State has handed over £105,000 to the Insurance Commissioners for the medical benefit of some 400,000 who have not formally joined any particular panels. Had they required medical service there is little reasonable doubt that they would straightway have placed their names on the list of the local panel doctor. In fact, this £105,000 has been a premium of health and sickness insurance to which the doctors on the panels are entitled morally, if not in the strict interpretation of the law. The best thing that could happen, if the Government wish to retain their amicable relations with the medical profession, will be to legalise the distribution of the unallocated money forthwith. A short enabling Act when Parliament meets would at once solve a difficulty that, left untreated, may end in sheer disaster. It is difficult to think that a man of the political acumen of the Chancellor of the Exchequer will fail to recognise the wisdom of a prompt and generous settlement of the point. This unallocated money was provided by the State for the services of medical men. If diverted from that original intention by no fault of the medical profession, but owing to defective administration of the Act, it may be asked pointedly what the Government propose to do with the money. Medical men have heard so much as to the solid financial advantages accruing to them under the Insurance Act that they will watch the issue of the dispute as to the unallocated payments with especial interest and curiosity.

CURRENT TOPICS.

A Coroner on Laudanum.

At a recent inquest held at Platt Bridge, Wigan, upon a five-weeks-old infant, some curious facts were disclosed relative to the sale of laudanum and its administration to young children. The unrestricted sale of "soothing syrups," some of which contain the tincture of opium, is, unfortunately, still responsible for a large number of infant deaths. In the case referred to, a mixture containing laudanum and aniseed was sold by a chemist to a little girl of eleven, but though the bottle was distinctly marked "Laudanum. Poison. Dangerous to Children," the mother gave two eggspoonfuls to her infant because it had "cried ever since it was born." It appears that the caution on the label was unheeded because the mixture resembled that sold by a woman in the neighbourhood, from whom it could be freely obtained by anyone. In the evidence it was stated that twopennyworth of the mixture would contain thirty minims of aniseed and eighty minims of laudanum. The County Coroner, Mr. S. Brighouse, in his address to the jury, lamented the state of affairs that rendered it possible for child life to be so endangered. After the jury had returned a verdict of "Death from narcotic poisoning by misadventure," the parents were recalled and the Coroner addressed some pertinent remarks to the mother about the folly of giving children such dangerous concoctions, instead of going at once to a qualified medical man. The objectionable practice of popping dirty "comforters" into babies' mouths as soon as they begin to cry was also strongly condemned. Altogether, Coroner Brighouse may be congratulated upon his outspoken remarks, for unless the Legislature step in and render it an offence to give laudanum to children under a certain age, except under medical supervision, this sort of thing will still continue.

The Physiology of Micturition.

It has been commonly supposed that the desire to micturate is dependent upon the stimulation of the sensory nerves of the posterior urethra, resulting in the reflex contraction of the involuntary muscle of the bladder wall and consequent relaxation of the internal sphincter. The neuro-muscular mechanism of micturition consists of nerve-fibres derived from the sacral plexus and the inferior mesenteric ganglia which innervate the detrusor and sphincter muscles. Finger has expressed the view that the posterior urethra becomes an integral part of the bladder when the latter is distended, supporting his contention by the fact that the length of the urethra is from 2 to 3 cm. shorter when the bladder is fully distended than when only moderately full. A series of interesting observations has been made by Drs. Alexander A. Uhle, and W. H. Mackinney, of Philadelphia, who record their results of skiagraphic examination of the urinary bladder in the *Urologic and Cutaneous Review* (Technical Supplement). They followed the work of Leedham-Green, using a 25 per cent. solution of cargentos (a colloidal silver oxide) which is non-irritating and casts a dense shadow. It is stated that the X-ray photographs show no evidence that the prostatic urethra becomes a portion of the fully distended bladder, a sharp line of demarcation existing between the two structures. The results of these studies appear to show that the internal sphincter muscle is the one which closes the vesical orifice, and that the posterior urethra never becomes a vesical neck. The portion of the bladder wall known as the trigone is the most sensitive of all, the fundus next, and the lateral walls least of all. The desire to micturate would, therefore, appear to be due to the distension of the bladder musculature and is not dependent upon the entrance of urine into the posterior urethra.

Learning and Teaching.

Lewis Carroll used to address the Magdalen Tower as "tu doces" because he said it looked like one. This is rather intricate abuse, as there is nothing inherently insulting in an accusation of pedagogy. In medicine at any rate it is not true that he who cannot do, teaches. It more often happens that he who can do, cannot teach although he tries to. Our profession as a whole is better at absorbing knowledge than at secreting it in a form suitable for the use of others. That comes from the nature of our calling. Our *technique* must be learnt by doing, not by being told how. "Knowledge by suffering entereth." And the suffering must not be all on the part of the material. Our teaching bodies have not quite got hold of this. They still attach an undeserved importance to lectures. A lecture is, for the student, a thing to get credit for. It consists in the spectacle of an eminent practitioner appearing before benches of crowded inattention to declaim, out of the richness of his experience, interesting or uninteresting things. It is usually considered an inevitable waste of valuable time, and although we should not like to go so far as this, we are forced to admit that there is too much of the infant school method of teaching in the medical curriculum. It has been said that a teacher's success is measured by the degree in which ideas come not from him but from his pupils, which, being interpreted, means that men should not be taught, but should be made to learn.

After this the Deluge.

A lady in Brooklyn, U.S.A., is reported to have recovered damages from an actor-manager because she wept continuously for over a year after seeing his company play *East Lynne*. It was not the sugary sentimentality of the piece alone that caused this long-lived lachrymosity, but a sequence of events directly attributable to it. Real wet tears of pure emotion filled her eyes as she left the theatre, and she fell over a hole in the stair carpet. Her lachrymal apparatus was injured and she kept up an accurate imitation of Niobe till the case was settled. It is a sort of poetic justice. People go to see sloppy plays in the sure and certain hope of enjoying an orgy of cheap emotion. They like to lose control of themselves in the theatre and to stain the place with hypocritical tears. With this example before them they may be more careful and will, perhaps, realise the wisdom of looking before they weep.

A Mosquito Campaign near London.

During the past summer the inhabitants of the suburban districts bordering upon Epping Forest have been troubled with mosquitos to such an extent that it was felt advisable to call a conference of the various health authorities concerned, with a view to inaugurating a campaign against the nuisance. Mr. W. E. Rowe, of the Chingford Urban District Council, presided over the gathering, which was held at the London offices of the Essex County Council last week. The neighbourhood has been visited and thoroughly explored by Dr. E. Halford Ross, associated with the John Howard McFadden Research Fund at the Lister Institute of Preventive Medicine, whose expert medico-entomological knowledge has thus been placed at the service of the public. The insects found in the district are the common domestic mosquitos or gnats which have been so prevalent in different parts of England during the summer and are almost ubiquitous in Europe. In certain parts of Chingford it was said to be impossible to remain out of doors after tea time, and windows had to be closed. The species found in the district bit only in the evening and at night, and they seemed particularly venomous from an hour after sunset to an hour before sunrise. The eggs of these insects are laid on the nearest water, especially on domestic water collections, such as water butts, though in the forest itself there are a few larvæ-containing pools. Happily, the species of mosquito responsible for all the trouble does not convey disease from one human being to another, but its bite is frequently followed by cellulitis and septic poisoning. According to Dr. Ross's estimate, the cost of an anti-mosquito campaign would not be large, so that it is to be hoped that the suggested remedial measures may be carried out without delay.

Dirty Dublin.

In the week ending September 20th there were, in the city of Dublin, 22 deaths from diarrhœa and enteritis in children under two years of age. All residents in Dublin have noticed the exceptional plague of flies this autumn. A connection between the high mortality and the large number of flies is not fanciful. The Medical Officer of Health for Dublin admits the relation, and in letters to the press warns the public of the necessity of killing flies, and of protecting foods from their visits. As far as we can make out, this is as far as the health department goes in the matter. Malaria has been stamped out in many previously pestiferous regions, not by the slaughter of individual adult mosquitos, but by destroying their breeding grounds. A similar course must be followed in the case of flies. Flies must be exterminated by preventing their production. Unless this be done, we can hope for little improvement in the rates of infant mortality in our big cities. In Dublin, while the health department puts a price on the head of the individual fly, the cleansing department, by neglect of its primary duty, maintains the richest of breeding grounds. Heaps of rubbish lie not only in the back lanes and courts, but in the very streets. Decaying vegetables and fish offal lie for days in the gutters of the streets. In some of the street markets vegetables are exposed for sale lying in the very gutter, without the protection even of a newspaper. The writer has seen a dog emptying his bladder on a bundle of rhubarb exposed for sale on the bare pavement. This is the food on which the poor of Dublin are fed.

Mussels and Health.

Epidemics of typhoid fever have been frequently traced to the consumption of mussels as well as to other shellfish. Cases of so-called "mussel-poisoning" have also occurred from time to time as a result of eating mussels which have undergone a certain amount of decomposition. The exact nature of the poison thus produced is still unknown, but it is probably a chemical substance elaborated by the vital activity of bacteria derived from their sewage-contaminated surroundings. This substance was regarded by Brieger as a ptomaine, to which he gave the name of *mytilotoxin*. In most of the recorded outbreaks of mussel poisoning the onset has been rapid, with vomiting, dyspnœa, difficulty in swallowing and speaking freely, spasms, and lack of co-ordination of movement. Some interesting facts relative to the consumption of mussels and their relation to health are mentioned by Dr. Niven, in his annual report on the health of the city of Manchester. Thus it is stated that in 108 of the 242 cases of typhoid fever registered in 1912, mussel eating was probably the cause of infection. It is recorded that the Saturday night's consumption is more plentiful than at other times in the week, and that, because drink had often been indulged in, the mussels were eaten after the closing of the public-houses. The influence of intoxication or semi-intoxication is said to have been considerable, because stale mussels are less easily detected when drink has been indulged in to excess. The practice of steaming the mussels has not proved of much protection to the consumer, because sufficient time is seldom given to the process. Dr. Niven is of the opinion that if the sale of uncooked mussels were prevented and the shellfish adequately cooked before sale, the enteric incidence would be greatly diminished. Further investigation appears still to be needed as to the actual facts with regard to infection of mussels by the typhoid bacillus, especially in the direction of obtaining full and careful case histories.

A New Tuberculosis Danger.

The paths of infection leading to the human body are indeed manifold. No sooner is one danger detected and dealt with than another half score spring up in its place. The tubercle bacillus, it has long been known, may come to unhappy man in a variety of guises. It may be mingled with the bloom of hothouse grapes, or with rich milk and alluring cream, or be inhaled into the air passages born on flimsy and invisible aerial rafts. Commonly it is conveyed in the imperfectly cooked flesh of tuberculous animals. A hitherto unsuspected source of danger has been recently detected by the Medical Officer for the Port of London, who has recently called special attention to the condition of tongues imported in a frozen condition from South America. An examination was made of the glands at the root of the tongue, and as a result 533 out of 12,800 tongues were found to be diseased. "The deposit of tubercule in the gland in many instances was so extensive," says the Medical Officer for the Port, "that it is obvious that the animal from which the tongue was taken must have shown signs of tuberculosis elsewhere. The glands in the tongues, in the majority of instances, had not been examined at all, and had not been even exposed. I recommend that these facts be reported to the Local Government Board, and to the Government of the Argentine Republic." Anyway, it is comforting to know that in this case, at any rate, the science that has exposed the danger has at the same time shown how it can be avoided.

PERSONAL.

H.H. Prince Alexander of Teck will distribute the prizes to the students of the Royal Dental Hospital of London and London School of Dental Surgery on Tuesday, October 7th, at 5 p.m.

Dr. M. J. Johnstone, of Brecon, has been appointed Tuberculosis Officer for the County of West Sussex.

Dr. H. S. Raper, of Toronto University, has been appointed Lecturer in Physiological Chemistry in the University of Leeds.

Mr. D. Priestley Smith, M.B., B.Ch.Birm., has been appointed Assistant Surgeon to the Birmingham and Midland Eye Hospital.

Mr. T. Harrison Butler, M.D., B.Ch.Oxon., has been appointed Assistant Surgeon to the Birmingham and Midland Eye Hospital.

Dr. F. J. Waldo, J.P., Coroner for the City of London, has been appointed a Warden of the Worshipful Company of Plumbers.

Mr. Alan H. Todd, M.B., B.S., B.Sc.Lond., F.R.C.S.Eng., has been appointed Surgical Registrar and Tutor, and Staff Anæsthetist at Guy's Hospital.

It is announced that Dr. W. A. Renner, of Sierra Leone, is about to retire from the Colonial Service, having been connected with the Medical Department for thirty years.

Mr. F. Montague Miller, M.R.C.S., J.P., late of 14 Arden Road, Church End, Finchley, N., twice Mayor of Hackney, who died on August 15th, left estate valued at £1,073.

Dr. J. Mitchell Bruce, M.A., M.D., F.R.C.P., will deliver the Harveian Oration at the Royal College of Physicians of London on Saturday, October 18th (St. Luke's Day), at 4 p.m.

Sir Ronald Ross, F.R.S., will preside at the lecture on October 7th, by Dr. D. E. Anderson, to inaugurate the sixth session of the Y.M.C.A. free weekly lectures on "Tropical Diseases."

Mr. H. F. Waterhouse, F.R.C.S., will preside at the annual dinner of past and present students of Charing Cross Hospital, at the Adelaide Gallery, Gatti's Restaurant, to-night, at 7 for 7.30.

Dr. F. S. Palmer, M.D., F.R.C.P., will deliver the Presidential Address before the West London Medico-Chirurgical Society at 8.30 p.m., on Friday, October 3rd, in the Society's Rooms, West London Hospital, the subject being "A General View of Malingering."

Dr. J. G. Risien Russell, M.D., F.R.C.P., will deliver the opening address before the North-East London Clinical Society, on October 2nd, at 4.15 p.m., at the Prince of Wales's Hospital, Tottenham, the subject being "Poliomyelitis: New Features of the Affection and Its Diagnosis" (with lantern demonstration).

FRENCH CLINICAL LECTURE

ON THE

OCCURRENCE OF MENINGEAL REACTIONS IN THE COURSE OF POLIOMYELITIS.

By PROFESSOR V. HUNTINEL,

Professor in the Clinique of Diseases of Children, Paris Faculte de Medecine.

[Specially Reported for this Journal.]

In the course of my last lecture, I presented you with a considerable number of observations of meningitis of a benign type. On account of the suddenness of their onset, and the intensity of the reactions which characterise them, those might have possibly been mistaken for cases of cerebro-spinal meningitis; but an examination of the cephalo-rachidian fluid—which is absolutely clear in all the cases, and at the same time containing a fair proportion of albumin, while presenting also a more or less considerable number of leucocytes—tends rather to suggest the idea of the presence of tuberculous meningitis.

Those meningeal reactions disappeared in some days without leaving behind any appreciable traces of their occurrence. Accordingly, I am not quite sure that similar cases have not been confounded with genuine ones of tuberculous meningitis. And, if we have in such instances injected a specific serum or administered some active medicament, what an alluring plea for our adopted medication! Happily for us we know that tuberculosis is not the real cause, any more than was syphilis in other cases; nevertheless, our diagnosis at the onset was decidedly hesitating.

The simultaneous appearance towards the middle of the course of an epidemic of meningeal reactions—if not even cases of true meningitis followed by flabby types of paralysis, transitory or permanent—soon reveals to us the veritable nature of the accidents which had surprised us by their abnormal features. For those cases of slight paralysis of febrile origin, poliomyelitis commencing with meningeal symptoms, acute meningitis, transitory cases sometimes followed by slight motor troubles, appeared in their turn as varying manifestations of the same malady; that is to say, of an infection of which the invisible germ presents a special predilection for the nerve centres.

Instances of cases similar to our own observations have been of frequent occurrence of latter years, but they have often been interpreted in quite different fashion. The oldest and most convincing are those which have been collected in Sweden and in America, where the Heine-Médin disease has presented itself in form of grave epidemics, in the course of which it has been admirably studied.

I can also refer to many important contributions which have been made in France. On July 30th, 1910, M. Netter demonstrated to the Association Française de Pédiatrie the fact that cases of poliomyelitis frequently commenced with a display of meningeal symptoms. In co-operation with his pupil, Tinel, he reported nine observations. In every one of those cases the meningeal reactions had been followed by paralytic troubles, more or less pronounced. MM. Laubry and Parvu presented to the Société Médicale des Hôpitaux, October 21st, 1912, a number of cases in which meningeal syndromes of indefinite nature were accompanied by rachidian polynucleosis in some cases, and in other instances by lymphocytosis.

Of those, the three cases of meningitis accompanied with lymphocytic reaction are of special interest to us. They are, in fact, identical in features with our own; while occurring, indeed, in subjects of somewhat more advanced years—being respectively æt. 19, 17, and 15 years. There was the same febrile onset, occurring in persons in previous enjoyment of perfect health; the same meningeal symptoms; the same characters of the cephalo-rachidian fluid; the same favourable termination of the attack. The question arises: Have we to deal with an infectious disease or with an ordinary or seasonal indisposition? Is it a case of attenuated infection of unknown origin, of which we may not be able at the moment to discover the actual pathogenic microbe? Such are the questions which have been proposed by writers on the subject.

At the same meeting, MM. Rist and Rolland presented five observations of meningitis of benign type, associated with an epidemic history. Those cases had occurred in lads of ages varying between 11½ and 15 years, and they exactly resemble our own. The authors demonstrated satisfactorily that the reports dealt with neither bacillary infections, nor with meningitis; either of the cerebro-spinal type or of the infectious nature which characterises the known types. On the other hand, they were still unable to decide on referring their cases to the compartment of epidemic poliomyelitis; for the good reason that in no one of their patients had the disease been productive of any paralysis which would constitute evidence of implication of the anterior cornua of the spinal medulla. The only difference between the record of their observation and that of ours lies, accordingly, in the interpretation.

M. Widal, in summarising his communication, has stated that over and above the cases of tuberculous and cerebro-spinal meningitis, there are to be met with cases of acute meningeal conditions which simulate either one or the other of those two types of meningeal inflammation, and of which the differential diagnosis can only be established by the revelations of lumbar puncture. Such conditions are frequently observed in way of secondary manifestation in course of the most various infective clinical entities—notably in that of pneumonia and of *la grippe*. They may, however, appear spontaneously and, as it were, on their own account; nevertheless, they are accompanied by general symptoms and the febrile associations which prove that the infection imperatively demands its localisation on the meninges.

At the following meeting, M. Widal—with his pupils, MM. Lemierre, Cotoni and Kindberg—resumed the discussion of those meningeal states. He brought forward six observations derived from the cases of patients, aged respectively 19, 30, 17, 28, and 18 years; that is to say, still young, but of much riper years than our little patients. In some of those, signs of infection were noted: herpetic vesicles, bronchitis, pulmonary congestion, jaundice; and these facts go to prove that the mischief is not absolutely circumscribed within the nerve-centres. In other respects, those cases quite correspond to our own and to those of the authors already cited. But those authorities avow that the ætiology of these cases is still very indefinite. They say that the idea of polio-myelitis must be excluded, as none of the patients presented the slightest trace of paralysis.

MM. Guillain and Ch. Richet (*fils*) have in turn recorded four observations. In these cases the meningeal reactions have been exclusively comparable to those that we have already described; but each has been accompanied by jaundice, which has in every instance presented the characters of a benign infective icterus. The meningeal, urinary, and cardiac symptoms were superadded to the two primordial signs, and thus was demonstrated the existence of a generalised infection.

M. Netter, at each of the two meetings at which his observations were presented, did not fail to signalise and affirm the correlation of those meningeal states with poliomyelitis. In support of this interpretation he has cited the facts derived from the experience of his own practice and those published by other physicians; he insists on the ideas of epidemicity and the frequent co-existence of meningeal lesions with paralytic troubles. Then he returned to that subject at a comparatively recent meeting, that of November 18th, 1910. Having collected a sufficiently large number of observations of those cases of infantile paralysis in which the patient had presented at the onset the characteristic symptoms of cerebro-spinal meningitis, he insists that the Heine-Medin disease is always accompanied by meningeal reaction, at least by the histological basis thereof. In addition to cases of infantile paralysis of meningeal origin, of which he cites very excellent observations, he reports others in which the meningeal symptoms have been followed by paralysis, slight or transitory. In every one of those cases, lumbar puncture has extracted a clear fluid, containing lymphocytes especially. The notion of epidemicity, and the predominance of the cases in the summer months—at a period of the year in which cerebro-spinal meningitis is sufficiently rare—may tend to make us suspicious of many of the cases. Side by side with cases in which the meningeal accidents were followed by lasting paralyses, with atrophy and reaction of degeneration, he has noted others in which the paralysis has been but slight and of short duration. He affirms that those cases should be regarded as attenuated types, and that their occurrence suggests that we should acknowledge the existence of incomplete varieties in which the clinical tableau is circumscribed by the meningeal symptomatology. We ourselves accept this interpretation absolutely without reserve. The slight and transitory paralytic phenomena which were noticed in three of our observations, and which, indeed, might very well have passed unperceived, do not permit us to entertain any further doubt regarding the poliomyelitic nature of the majority of the meningeal reactions that we have hitherto observed, although we cannot yet affirm that all of them should be interpreted in this fashion.

This leads me to pass in review the history of a series of meningeal reactions which take place in the course of the various types of poliomyelitis. Those manifestations, sometimes so serious, have been the subject of many investigations in Sweden, America, Germany, Austria and France. The greater number of the resulting publications have had their contents summarised, almost simultaneously, in two excellent theses, one by Mme. Tinfel-Giry and the other by M. Schreiber.

It has now been approximately proved that poliomyelitis—in its epidemic form, and even in its sporadic, that is to say, in its usual type of infantile paralysis—is due to the presence of a germ which we are not able to see with the aid of the microscope, and of which we are consequently unable to recognise the characteristics. The existence of this germ has been placed beyond doubt by the excellent researches of Wickman and of Landsteiner. We sometimes give it the name of "médullovirus." It belongs, as does that of rabies, to the class of filtrable viruses, and, like the latter, it displays a wholly special predilection for the nervous system.

At the Congress of the International Association of Pediatrics (October, 1912), M. Zappert, who has discussed the pathological anatomy and experimental pathogeny of the Heine-Médin disease in a communicated report, formulated the following conclusions.

"Poliomyelitis is an infective disease produced by a figured virus. The existence of this virus has not yet been established by the microscope, but the question has been placed beyond doubt by experiments on animals. The virus seems to enter by the respiratory passages and to be disseminated by the lymphatic channels. It has quite a special predilection for the nervous system. It invades the centres with the greatest rapidity, and especially the spinal cord itself. We again find it in the lymphatic glands, tonsils, and the salivary glands. We have even discovered it outside the living organism *in the dust of a patient's bedroom.*" He admits that the penetration of the meninges is but slight, if we compare the extent of the same to that which has been reached in the spinal medulla, or even in the brain. The virus of poliomyelitis is an agent of infection; with this power it is able to exert its influence, in some instances, upon organs which are usually respected. Doubtlessly it is in this way that we must explain the occurrence of bronchitis, of pulmonary congestion, of digestive disorder, and also the cutaneous phenomena and the jaundice which are displayed by some patients.

Thus the infection, instead of localising itself exclusively in the cells of the anterior cornua of the spinal cord, as was formerly believed, diffuses itself beyond these structures, and often reaches the envelopes of the nerve centres.

At the same Congress, M. Müller also dealt with the poliomyelitis of rabies; he admits the frequency of the abortive forms of the disease, and insists on their importance as being capable of disseminating the disease, and also of conferring immunity. M. Netter has again returned, in connection with these reports, to discussion of the frequency of meningeal phenomena, completely or vaguely defined, in the Heine-Médin disease, and he proposes to treat them by urotropin, which passes readily into the cerebro-spinal fluid.

Accordingly, the meningeal phenomena which occur in cases of poliomyelitis appear to us to have an unquestionable clinical interest; and the observations presented in my last lecture enable me to attack this subject in a medium of actuality. Whenever we have had occasion to make an autopsy of a victim of poliomyelitis there was found a certain degree of meningeal irritation, visible to the naked eye, and readily displayed by the microscope. Some writers affirm that this reaction is the primary one, preceding the appearance of nerve lesions. The infective origin of the disease renders this opinion fairly plausible, but the lesions described are variable. In some cases the subarachnoid space had been invaded by a sanguineous extravasation which extended around the nerve-roots over an area more or less considerable. This is an exceptional feature: it has been found in monkeys submitted to inoculation, but it has also been met with in the human infant. In the usual cases, as met with in man, the macroscopic lesions are not clearly defined; they merely consist of a more or less marked congestion, but the histological lesions are evident. These are characterised by a lymphocytic infiltration, slightly marked in some cases, very much so in others. Distinct patches of leptomeningitis may be found on the spinal cord, or collections of round cells investing the vessels at the bottom of the anterior fissure. The sub-arachnoid space often remains unaffected; it is sometimes invaded by lymphocytes, but it must be noted that there is no exact proportion between the meningeal symptoms and the anatomical alterations clinically revealed by examination of the cerebro-spinal fluid.

The meningeal reactions of poliomyelitis have been noted by both Swedish and American writers. I may cite the names of Medin, Bull, Geirswold and Leegard, Wickman, Lundgreen, Caverly and Macphail, etc. In 1874, Leyden indicated the occurrence of slight degrees of paralysis after meningitis, and pointed out their analogy to those of infantile paralysis. Pierre Marie said: "I am convinced that a certain number of the deaths attributed to meningitis are no other than cases of unrecognised infantile paralysis; cases in which the lesions proved fatal too rapidly to afford the time necessary for development of the complete clinical tableau of that affection." Integrity of the meninges had gradually come to be regarded as a characteristic of infantile paralysis. If a case of poliomyelitis began with meningeal accidents, it was regarded as one of meningitis followed by motor sequelæ. It is only of late years that the frequency of spinal lymphocytosis in the Heine-Médin disease has been definitely noticed, and that we have been able to connect this malady with the meningeal reactions with which it has often been accompanied. Triboulet and Lippmann, Guinon and Paris, Raymond and Sicard, Sicard and Tanon, and many other clinical observers have published interesting cases; some authors have gone further, and even sought to identify poliomyelitis with cerebro-spinal meningitis. Wickman, in 1905, was the first to describe in detail a meningeal form of the Heine-Médin malady, and he showed that a great number of the cases which had been labelled paralysis consecutive to acute meningitis were in reality but examples of poliomyelitis with meningeal reactions. Nobody now disputes the accuracy of that opinion.

It would also seem that meningeal reactions in the course of poliomyelitis have become singularly frequent of latter years. Mme. Tinel-Giry, while admitting those cases only in which the manifestations were distinctly marked, has noticed 24 instances in 102 cases. At present the proportion is probably greater; besides, it varies according to the epidemics.

In the Heine-Médin disease, meningeal accidents which are clinically recognisable may be completely absent; in some cases, on the other hand, they dominate the scene and attract special attention. Their gravity is far from being the same in all, and they frequently proceed in conjunction with paralyses of various extent and duration. We may here follow the example of Schreiber, from whom we are about to borrow largely, in dividing our observed cases into four groups.

The first group includes those of simple, benign meningitis, usually appearing in epidemic form, characterised clinically by sudden onset and by febrile symptoms which approximate them to cerebro-spinal meningitis, while the modifications of the cerebro-spinal fluid, especially the lymphocytosis, rather suggest the idea of tuberculous meningitis. These cases cause serious embarrassment at the onset, as we are unable to interpret them definitely, but they recover rapidly enough. The following are two examples:—

Wickman, in the Swedish epidemic of 1905, noted meningeal symptoms in four children of the same family. This suggested cerebro-spinal meningitis till a fifth child became affected and presented the features of infantile paralysis, which provided a rectification of the diagnosis of the other cases. Zappert saw, in the case of a girl of five, certain serious meningeal phenomena (violent pains, fever, rigidity of the neck, vesical trouble); three days later the lower limbs were affected by paraplegia. Some days after, the sister of that little girl, who was aged 6, presented, in her turn, the signs of meningitis. It was expected that she would also develop paralysis of the lower limbs, but nothing of the kind occurred, and she recovered rapidly.

Most of our observations may be included in this class, and doubtless also those that I cited in the former lecture—of Rist, Laubry, Widal, Guillain and their pupils. Medin has observed similar cases. They have also been met with in the United States, in Germany, and in Austria, especially in the summer months, and they have been specially frequent in the later epidemics. Such cases of meningitis, which are nearly always characterised by spinal lymphocytosis—possibly in certain cases, also by a certain degree of polynucleosis—constitute one of the four abortive types of the Heine-Médin disease which have been described by Wickman.

In some patients the *médullovirus* produces appearances of generalised infection which may easily be taken for those of influenza, especially if there are any bronchial manifestations; in others it develops pains in the limbs and along the spine, which cause a diagnosis of articular rheumatism; in others still it evolves gastro-intestinal derangements, with or without jaundice, of which the true origin may not be remotely suspected, if not associated with nervous phenomena. Those irregular manifestations are grouped in certain instances. For example, we find icterus appearing simultaneously with meningeal reactions; bronchitis or pulmonary congestion may precede infantile paralysis—facts which prove their infective origin. Such ill-defined cases are able to disseminate the infection, and in the majority of instances it is almost impossible to determine their nature. For this purpose it would be necessary to neutralise the virus with the serum of patients and inoculate monkeys therewith—a delicate and expensive test which can be applied only in certain laboratories.

In addition to such cases of benign meningitis, there are fatal ones. The fact, however, is that such are absolutely exceptional, the cure being usually rapid and complete. It is probable that in those malignant cases it is not the meninges alone that are affected, but that the nerve tissue also has undergone profound and selective alterations. The patients are carried away before the paralysis has had time to be established. For example, here is a case recorded by Oppenheim. A child who had come from Paris fell sick at Cologne, and succumbed to hyperacute meningitis. Her sister, aged 9 years, soon after presented meningeal symptoms in turn, but her case evolved as one of infantile paralysis. Zappert cites another. A child of 8 years was suddenly carried off by meningitis. At the same time a child of 4, living in the opposite house, presented a paresis of the left leg; and, in another neighbouring house, a child of 3 was attacked with violent gastro-intestinal symptoms, which were soon followed by paraplegia engaging the lower limbs.

The commonest cases are those in which the meningitis is followed by paralysis, transitory or permanent. Sometimes the paralysis is so slight and transitory that it may be disregarded, of which I have already given you an instance in detail. The following case of Zappert's is a typical one.

Joseph B., aged 9, who was attacked, had a sister, aged 5½ years, who had been attacked fifteen days before with meningomyelitis, with persistent paresis of the lower limbs. On January 2nd, 1909, there was epistaxis, headache, pains in back of neck, and calves of legs, fever, nuchal rigidity. For ten days the child was unable to sit up, as the muscles of the back were paralysed. On the 16th he began to sit up alone in bed; on the 23rd he was well and walked about like everybody else. Another case is mentioned by Triboulet, Harvier and Vaudescal. A child of 6 was brought to hospital. There was a meningeal syndrome of the clearest type—extreme rigidity of neck and trunk, Kernig's sign, lymphocytosis. Six days after the onset, right brachial monoplegia developed, and abolition of all the tendon reflexes was noted. Still this case of infantile paralysis, notwithstanding its startling onset, proved benign and was cured in ten days.

Léon Bernard and Maury have reported two cases: the first was one of meningitis and transitory paresis of lower limbs; the second, meningitis, hemiplegia of the right side, in a baby of 18 months, which proved transitory. The four following are borrowed from Netter:—

(1) Lucienne G., 11 years, attacked on September 28th, 1909, with headache, pain in back, Kernig's sign, and fever. October 2nd: Some meningeal symptoms; vaso-motor line. Lumbar puncture: Hypertension of fluid; no microbes or cell elements; little albumin. October 5th: Paresis of sacro-lumbar muscles and of lower limbs. On the following day the weakness diminished and the patient was able to sit up. On the 8th she felt pains in all four limbs. On the 21st she left hospital, walking well.

(2) Girl of 4½ years. Sudden attack of fever and colic. Third day: Nuchal rigidity and transitory aphasia. Speech restored on following day.

(3) Girl of 6 years. Febrile onset (104°). Nuchal rigidity; then Kernig's sign; meningeal line; some vomiting; constipation. Cerebro-spinal fluid clear. Inability to move limbs or trunk. After three weeks the child began to sit up; by degrees she was able to leave bed, but the limbs remained feeble for a long period.

(4) Boy of 7 years. Same brusque onset; same symptoms; same duration; same termination.

I might multiply such cases; they are, indeed, common enough, and it is probable that in many cases in which attention has been aroused by meningeal symptoms only, partial paralysis, light or transitory, would have been noticed if skilfully sought for. In two of our own cases weakness of the lower limbs was noticed, but this proved so transient that hardly any importance was attached to it. But if we do not notice paralysis, or even paresis in most cases of infection by the *médullovirus* we almost invariably find complete abolition of the tendon reflexes. Between the simple meningeal reactions, the meningitis followed by temporary paralysis, and grave infantile paralysis commencing with meningeal symptoms, there exists an uninterrupted chain of intermediate types. When meningitis is followed by paralytic sequelæ, located in the limbs, we should always ask ourselves whether we are not dealing with a case of poliomyelitis.

Those cases of paralysis which are seen in the course of poliomyelitis of meningeal onset are far from being so benign. Some persist for months, atrophying and destroying many muscular groups. I remember a case of this kind which remains permanently present to my mind—for it was with the patient that I saw Charcot for the last time. A girl of 6 had been attacked by meningeal symptoms which had given great anxiety to her physician, my excellent friend, Dr. Talamon. After some days, paralytic symptoms appeared in all four limbs. I thought it a case of polyneuritis; that was also the opinion of Charcot. The weakness lasted for some months, but it finally disappeared.

Sometimes atrophy of the muscular masses is definitive, as in ordinary infantile paralysis. If I wish to characterise infantile paralysis, as resulting from epidemic or sporadic poliomyelitis, I should say that the latter, more benign in appearance, produce motorial and nutritional troubles much more profound and persistent than do the former, although these attacks are more brusque and more menacing. In the epidemic cases the infection seems to distribute itself over a greater area of the nerve centres; in the sporadic it limits the field of activity, but destroys the cells with which it comes into contact.

There are also cases of paralysis of meningeal origin which rapidly destroy life. Beginning with the lower limbs, the trunk is invaded, then the upper limbs, and at last the bulb itself. Thus arrive troubles of respiration, of circulation, and of deglutition, which make prolonged survival impossible. These ascending paralyses realise the clinical syndrome of Landry's disease. The patients preserve their intelligence to the end. They die of asphyxia, the respiration ceasing during sleep.

The following case was observed in the Enfants Malades (1910), and was published by MM. Nobécourt and Schreiber:—

B. M., æt. 4, was brought to hospital August 31st, 1910, with a diagnosis of cerebro-spinal meningitis. The nucha was, however, flaccid and the limbs swinging. The weakness was nearly complete; there was tenderness on pressure, and a slight diminution to sensibility to pin-pricks. Abolition of tendon reflexes. Presence of meningeal line. Temperature 38.6° (101.5° F. quam. prox.); pulse 134. No oculo-pupillary phenomena. Lumbar puncture: hypertension of cerebro-spinal fluid, clear, albuminous, with some traces of glucose. September 1st.—Paraplegia complete, with flaccidity; the child had great difficulty in sitting up. September 2nd.—Condition still worse; paresis of upper limbs; temperature 103.2°. In the afternoon, increase of paralysis, copious sweating. Intelligence preserved; the child understands, but articulates her responses badly. No Dysphagia. She died in the night. Having gone to sleep, the will—which alone had maintained the respiratory act—was found wanting. The autopsy showed congestion of all the organs. Hæmorrhages, in quantity, found in the sub-arachnoid spaces over the whole length of the spinal cord. Obliteration of the vessels of the dura mater, which were surrounded with numerous mononuclear leucocytes. Leucocytic infiltration, and small hæmorrhagic foci in the grey substance of the cord; slighter lesions in the white substance.

M. Mery has communicated a very similar case. Three others have been observed in the other services of the Hôpital des Enfants Malades.

Is it necessary to multiply examples in order to prove the relationship of meningitis—acute, benign and epidemic—with the meningeal reactions of the Heine-Médin disease to be legitimate? Curable meningitis and poliomyelitis appear at the same periods and in course of the same epidemics. Typical and ill-defined cases alternate in appearance, not only in the same localities, but in the same families. The same sudden and febrile onset; same leucocytic formula in cerebro-spinal fluid; same rapid evolution. Still the demonstration is not complete. There is wanting, in most cases, the proof obtainable by neutralisation of the virus by the serum, and inoculation of the monkey. I shall be surprised if laboratory researches do not succeed in confirming the findings of the clinique.

The study of meningeal reactions in the course of the Heine-Médin disease, which is merely skimmed in this lecture, permits us to offer certain concluding remarks. If the meninges appear undisturbed at the onset of most cases of this malady, in others the paralytic phase is preceded by a more or less distinct meningeal period; besides, indeed, this meningeal period may alone develop, and not be followed by any paralysis. All forms of poliomyelitis—spinal, bulbo-protuberantial, cerebral, or acute-ascending—may begin with a meningeal syndrome. When paralysis appears in succession to meningeal accidents, we have to ask ourselves whether we are in the presence of a case of poliomyelitis which began with a strong meningeal reaction, or a meningitis followed by paralytic sequelæ. If we are dealing with paresis or painful paralysis, extended and flaccid, with abolition of reflexes, and not with a case of paralysis limited to the distribution of one of the cranial nerves, the chances are that the cause is to be sought in the Heine-Médin disease. If the meningitis has been followed by neither paralysis or even weakness of certain groups of muscles the interpretation is more difficult. Let us remember, however, that those meningeal conditions have usually a brusque onset, comparable to that of cerebro-spinal meningitis, while the modifications of the cerebro-spinal fluid suggest those which characterise tuberculous meningitis. In the presence of this clinical paradox it is necessary to remember poliomyelitis, to note with care the absence of all germs from the cerebro-spinal fluid, and carry out experimental inoculations on the guinea-pig. The result of such inoculations must generally arrive too late for the purpose of clearing up the diagnosis, for the patient will have long been cured when the time for sacrificing the animal has arrived. But it will give us at least the opportunity, in doubtful cases, of eliminating the proud supposition that we have cured a case of tuberculous meningitis.

If paralyses supervene, they are usually transitory; they are, however, in some cases, slow to disappear, and in the (happily) exceptional cases they adopt an ascending course which is rapidly fatal. But in such cases the paralytic phenomena follow very closely on the origin of the meningeal manifestations, and the diagnosis is, accordingly, not long left in doubt.

In summarising: the *médullovirus* may be responsible for a whole gamut of misdeeds, from reactions so slight and vaguely defined as to be quite ignored, up to the most formidable developments. When such meningeal reactions, medullary or encephalic, present themselves to you, do not make undue haste to formulate a pessimistic prognosis to which the future will furnish a humiliating contradiction: also, do not believe too readily afterwards that you have arrested the progress of a case of tuberculous meningitis.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Wyatt Wingrave, M.D., Pathologist and Dean of the Central London Throat and Ear Hospital. Subject: "A Consideration of Vaccine Therapy."*

The International Anti-Alcohol Congress was opened last week at Milan. Prof. Marchiafara, Consulting Physician to the Pope, delivered an address upon the progress of alcoholism in Italy.

Owing to delays caused by the recent labour troubles in the building and allied trades, the Committee of Management of King's College Hospital are compelled to postpone the opening of the new buildings fixed for October 1st. A further announcement will be made shortly.

ORIGINAL PAPERS.

THE NAUHEIM TREATMENT IN ENGLAND.

BY LESLIE THORNE THORNE, M.D., B.S., ETC.,
Late Medical Examiner, London County Council Technical Education Board.

THE treatment of diseases of the heart and circulation by mineral baths and exercises has now a well-established position as a therapeutic agent, but it is not yet so generally employed as would be expected when one considers the highly satisfactory results obtained by its use and the wide range of its application. There are still many of the medical profession who do not realise that the treatment can be given in England as successfully as at Nauheim, and who regard it rather as a last resource, when all other forms of treatment have failed, or believe that it is only useful in cardiac conditions in which no valvular lesion is present. The object of this paper is to deal briefly with the various forms of cardiac and circulatory disease which have been successfully treated by the Nauheim methods in this country, and to give one or two examples of such cases.

There is a widespread belief in England that a course of Nauheim baths is synonymous to a course of carbonated effervescing baths, and it is probably due to this erroneous belief that this method of treatment has often been wrongly applied, and has therefore failed to produce a satisfactory result. In many cases of cardiac and circulatory disease the effect of carbonated baths is distinctly injurious, and in all cases it is decidedly unwise to begin a course with this form of bath. The mild thermal baths which are given at Nauheim at the commencement of a course should always be administered at first, and only later on, in a certain number of cases, should carbonated baths be given.

The Nauheim baths produce a dilatation of all the cutaneous capillaries, thus lowering the blood pressure and relieving the heart from excessive work, and thereby enabling it to contract more perfectly and less rapidly, and giving it a comparative rest, so that, as the course proceeds, the muscular tone of the heart is gradually improved, the dilatation disappears, the circulation in all the organs of the body becomes more efficient, and metabolism is quickened, with the result that any toxic material is more easily eliminated, and a more normal circulation is set up in organs which have probably got into a congested and degenerate condition. The patient therefore continues to improve in health for a long period after the termination of the course and, in many cases, does not relapse. When, however, the condition is due to a faulty metabolism produced by a gouty or rheumatic diathesis, a second course of baths is needed after the lapse of a year or eighteen months, and sometimes a third at a later period; but in cases due to acute febrile attacks, including acute rheumatism in children, the patient does not often relapse unless subjected to a second attack of the disease which was the cause of the cardiac mischief in the first place. During the last eighteen years I have treated a very large number of cases in London by these methods, and it is my experience that, if they are properly selected, the results are highly satisfactory and the failures are very few. Most of the cases that come under my observation have been treated by drugs and rest for lengthy periods, sometimes several years, without any material or lasting improvement; indeed, a large percentage of the patients who derive the greatest benefit from a course of Nauheim baths are of that class which do not yield to other forms of treatment.

In selecting cases for treatment by baths and exercises the question of suitability is almost always one of degree rather than of kind, though there are certain forms of cardiac disease which are more benefited than others. It is not possible in the space of this article to give a detailed account of all those conditions which will derive benefit from this form of treatment, but the following short classification may be of help as a guide to those who have no special experience of the range of application of the Nauheim treatment.

The Post-Influenzal Heart, weakened and dilated by the toxins of the disease, and giving rise to symptoms of dyspnœa, palpitation and cardiac pain, and ultimately causing a general invalidism and inability for any work or pleasure, is one which responds rapidly to this treatment. Many cases of this class have been restored to health by a course of Nauheim baths, after long periods of rest and cardiac tonics have produced no material or lasting benefit.

Cases of High Arterial Tension, in which the area of cardiac dulness is found to be enlarged; exhibiting symptoms of dyspnœa, headache, palpitation, cyanosis and general ill-health, will respond well to a course of Nauheim baths, and the blood-pressure will drop from 20 to 40 mm. hg. during treatment, often falling from 170-80 mm. hg. to 130-40 mm. hg., and the troublesome and dangerous symptoms will be relieved for a long period. These cases are usually met with in middle-aged people, but they also occur in the moderately young, especially men who have led a strenuous, sedentary life and are subject to rheumatic or gouty attacks.

Cases of Valvular Disease with Cardiac Dilatation, indicating a weakened and degenerate condition of the myocardium, respond well to the treatment, more especially if high arterial tension is present. In uncomplicated cases of valvular disease with cardiac hypertrophy treatment is not necessary, but it is seldom that a case of valvular disease of long standing with a raised blood-pressure does not exhibit some symptoms of cardiac dilatation and defective circulation, and if these are present they can be relieved by a course of baths more satisfactorily and for a longer period than by any other form of treatment.

When premature cardiac contractions, arising in the ventricles or auricles, are present, causing cardiac irregularities and distress to the patient, it is often found that they gradually decrease in frequence during a course, and that at the end of the treatment a perfectly regular heart's action is established, this being due to the improved nutrition of the conductive mechanism of the heart. Case 1 is a good example of improved conductivity, the result of a course of Nauheim baths.

Cases of Obesity with Fat-clogged Hearts and Raised Blood-pressure are not only greatly improved in health by a course of Nauheim baths, but lose fat steadily both during the course and for some months after; so that a patient weighing 17 stone before treatment will lose about one stone in weight during the course, and will probably have lost another stone three or four months later. The reduction in the weight is, I believe, due to the improved circulation favouring a formation of healthy tissue instead of fat, and to the patient's ability to take more exercise when he finds he can do so without experiencing dyspnœa and cardiac pain. A large percentage of obese persons suffer from dilated, fat-clogged hearts and raised blood-pressure, and no treatment that does not relieve these conditions will do any permanent good. Case 2 is an example of this kind.

Cases of Irritable Heart of a "functional" nature, where no organic lesion is discovered, are often greatly relieved by this treatment, but they are not so certain of improvement as cases where definite dilatation is present.

Cases of Anæmia with Cardiac Dilatation, which do not respond to treatment with iron, arsenic or general hygienics, will often show immediate improvement if a course of Nauheim baths is given in conjunction with other treatment.

It is not advisable to give the Nauheim treatment in cases in which there is general evidence of a broken-down constitution, nor have I found it of much benefit to cases exhibiting auricular fibrillation, or in those in which very advanced degeneration of the vessel-walls is present.

The following examples of cases treated by the Nauheim methods illustrate well the wide field of usefulness of this treatment, as they differ in most details almost as widely as any two cases of cardiac or circulatory disease can do.

Case 1.—A young man, æt. 24, had had a "weak heart" from birth, had always suffered from dyspnœa, palpitation, bad headaches, sleeplessness, and dyspepsia, was unable to go in for sports, was often troubled by severe pain over the cardiac region and a sense of exhaustion; at times he was greatly distressed by marked cardiac irregularity, which gave great discomfort. On examination, the following signs of cardiac disease were present: He was markedly cyanosed, especially the ears and lips, and his fingers and toes were clubbed and blue, his pulse was 94 per minute and markedly irregular. These irregularities were proved by a polygraphic tracing (Fig. 1) to be due to premature ventricular contractions, which occurred about every fourth or fifth beat; the heart's impulse was diffuse and forcible, and the area of cardiac dulness was enlarged (Fig 3 AA). On auscultation a very loud systolic murmur was heard all over the left side of the chest and in the left axilla, its area of greatest intensity being over the upper part of the sternum. The case was undoubtedly one of congenital heart, probably patent foramen ovale, with possibly sub-aortic stenosis.

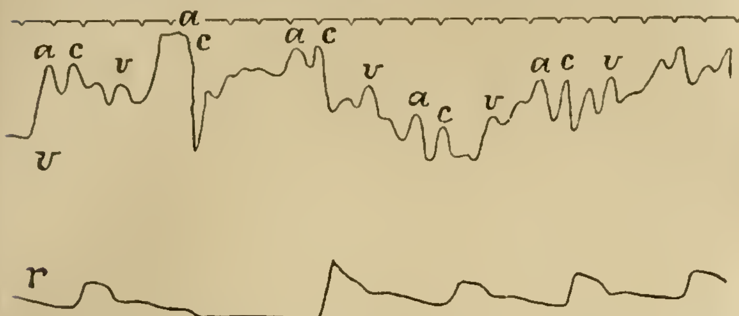


Fig. 1.—Polygraphic Tracing before Treatment, showing example of premature ventricular action. *v* Venous tracing. *r* Radial tracing.

I gave him a course of 24 Nauheim baths, extending over a period of five weeks. His symptoms began to improve almost at once; he slept better and lost the sensations of cardiac irregularities and exhaustion, and towards the end of the treatment he was quite free from dyspepsia and his colour was much improved. At the conclusion of the course his cardiac impulse was less diffuse and less forcible, the area of cardiac dulness was normal (Fig. 3 BB), the murmur was not so loud or diffuse, the pulse was 72 per minute and practically always regular in action, as is shown in Fig. 2, a section of a long strip of polygraphic tracing taken after his course was finished. His blood-pressure was 70—100 mm. hg. during the whole course, and never varied much.

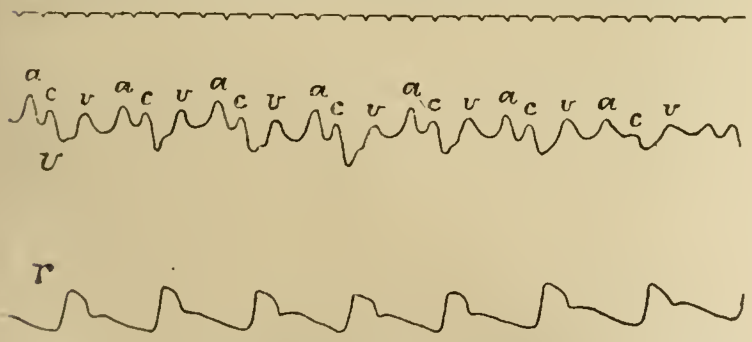


Fig. 2.—Polygraphic Tracing showing regular action of pulse after treatment. *v* Venous tracing. *r* Radial tracing.

Case 2.—The patient, a married woman, æt. 51, who had a very rheumatic and gouty family history, had an attack of rheumatism and sciatica five years before I saw her, since when she had suffered from dyspepsia, palpitation, pain over the cardiac region on walking, shortness of breath, and has been growing increasingly stouter. She had had various treatments by dietary and drugs, but had never got any definite relief from them, and had steadily got worse. When I first saw her, her condition was as follows:—She was a very stout woman, height 5 ft. 3 in., weight 12 st. 6 lb. She was somewhat cyanosed and suffered from dyspnœa on the sightest exertion; her ankles were œdematous. On percussion, her cardiac dulness was found to be greatly enlarged (Fig. 4 AA), and the sounds were so faint they were only just audible at the apex and could not be heard over the base of the heart; the pulse was regular, 82 per minute; the blood-pressure was 90-148 mm. hg., and the urine was normal. I gave this patient a course of 25 Nauheim baths, at the end of which she was able to walk several miles with comfort, whereas for five years previously she had not been able to walk without pain and dyspnœa, and consequently never walked at all. Her dyspnœa was entirely cured and she had no palpitation; her pulse was 76 per minute, her blood-pressure 75—120 mm. hg., and her cardiac dulness was normal (Fig. 4 BB). Although this patient improved greatly in health during the treatment she only lost 5 lb. in weight at that time, but I heard from her four months later to the effect that she had lost 1 st. 3 lb. in weight, and had just taken a twelve miles walk with comfort.

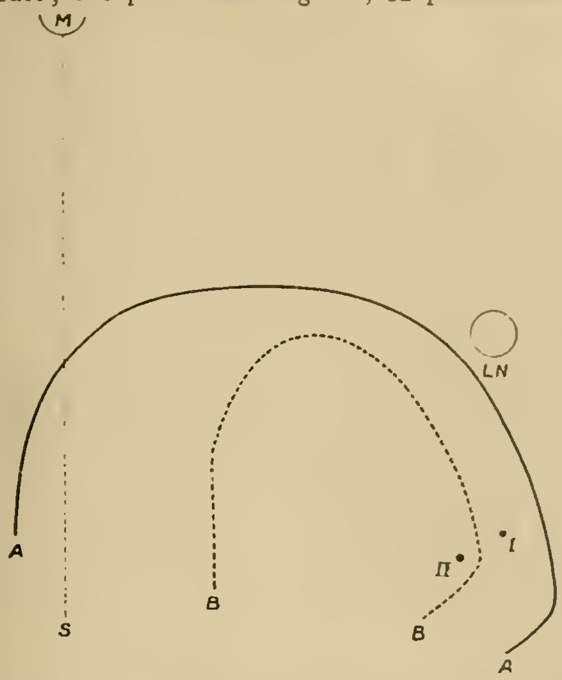


Fig. 3.—AA Area of Cardiac Dulness before Treatment. I Apex beat. BB Area of Cardiac Dulness after Treatment. II Apex beat. MS Mid-sternal Line. LN Left Nipple.

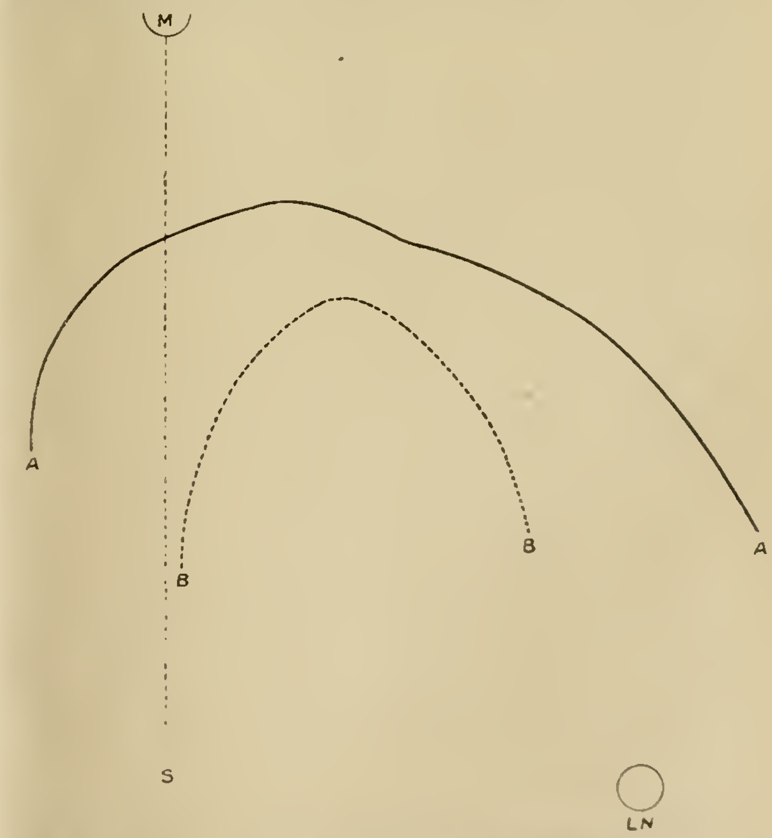


Fig 4.—AA Area of Cardiac Dulness before Treatment. BB Area of Cardiac Dulness after Treatment. MS Mid-sternal Line. LN Left Nipple.

The above case is a typical one of obesity due to defective circulation. The patient no doubt had rheumatic myocarditis during her illness five years before she saw me; this weakened the cardiac muscles and led to dilatation. The raised blood-pressure due to the rheumatic condition led to further strain upon the heart, the circulation was impaired, and fat was rapidly formed instead of healthy tissue, the heart itself becoming hampered by fatty infiltration. No good can be done in cases of obesity of this kind till the heart and circulation are put into proper order. I believe the reason why the weight was not much diminished till some time after the course, was due to the fact that all the organs were so degenerated by the long period of defective circulation that, although the circulation was greatly improved, it needed several months of this improved circulation to restore the organs to a normal condition.

HILUS TUBERCULOSIS (ROOT PHTHISIS). (a)

By R. MURRAY LESLIE, M.A., B.Sc., M.D.,
Senior Physician, Prince of Wales's Hospital; Physician, Royal Hospital for Diseases of the Chest, London.

The object of this communication is to place before the members of the Congress some of the main facts in support of the view that chronic pulmonary tuberculosis in children and in a large proportion of adults usually starts at the root or hilus of the lung and gradually spreads from the hilus towards the periphery. A more detailed account is given in the author's original papers on "Hilus Tuberculosis," published in the *Clinical Journal*, January 22, 1913, and the *Journal of Tuberculosis*, June, 1913.

Hilus tuberculosis includes (*a*) tuberculosis of the hilus glands, and (*b*) tuberculosis of the pulmonary tissue in the neighbourhood of the hilus.

(*a*) Tuberculosis of the Hilus Lymphatic Glands.

The frequency of tuberculous deposit in the tracheobronchial lymphatic glands at the hilus has long been recognised, and, indeed, can be readily understood when the fact is recalled that they are, as Sir Douglas Powell well expresses it, "the dust-bins of the bronchopulmonary tracts," and are also in direct communication with the cervical and abdominal lymphatic systems, and therefore may be infected by way of the tonsillocervical and intestino-mesenteric channels. The bronchial glands are often the first tissues attacked by tuberculosis in early life, and may indeed be the only foci of disease in the whole body. So extraordinarily common are tuberculous foci in the bronchial glands and the surrounding tissue that the majority of all bodies examined post-mortem, whatever the cause of death, present evidence of old-standing disease in these parts. Careful dissection is often necessary to expose to view the smaller indurated, caseous, or calcareous glands situated on the bronchi and below the tracheal bifurcation, where they are often concealed by the overlying hilus tissue, although during life they may have stood out quite clearly in an X-ray photograph as definite rounded dark shadows. It is modern radiography, however, that has revealed how common enlarged and calcified glands are in the living subject. The latter stand out as dark clearly defined areas. Postero-lateral as well as antero-posterior X-ray examinations must be conducted with the object of revealing enlarged glands situated behind the "median shadow" cast by the sternum, heart, and great blood-vessels.

As regards the incidence of glandular tuberculosis, evidence is accumulating that catarrh of the bronchial mucous membrane is one of the most important predisposing causal factors, and in this way may be explained the frequent occurrence of tuberculous adenitis of the bronchial glands as a *sequela* of whooping-cough and measles. Other observers are of opinion that the thoracic glands are more often secondarily involved as the result of buccal (including tonsillar) and intestinal infection. All authorities are agreed that tuberculous disease of the bronchial glands (like that of other glandular tissues) is much more common in children, no doubt owing to the fact which Dr. H. D. McCulloch has recently emphasised—"that a child possesses a conspicuously developed lymphoid and lymphatic system, the highly cytogenous glands of which bear the brunt of the overwhelming microbic invasions to which the sterile tissues of the young child are necessarily exposed in a notoriously microbic environment, and before immunities have become established."

Fortunately there is a marked tendency to spontaneous cure in the case of glandular tuberculosis, as is evidenced by the frequency with which calcified bronchial glands are met with radiographically and post-mortem in cases where there had been no suspicion of any tuberculous disease. At the same time the fact must not be overlooked that the disease may lie latent in the glands for prolonged periods, and may be followed many years later by important and serious consequences.

(*b*) Hilus Tuberculosis affecting the Pulmonary Tissue.

Hitherto the *apex* of the lung has always been regarded as the most frequent primary focus of pulmonary tuberculosis. In 1880 Sir J. Kingston Fowler stated that a spot 1 to 1½ inches below the actual apex was the primary seat of disease in the large majority of cases, and then described a "line of march" spreading in each lobe *from above downwards*. Recent pathological researches, however, in conjunction with radiographic evidence have thrown considerable doubt on the correctness of the apical hypothesis, and on the contrary strongly support the view that the *hilus (root) and not the apex is in the generality of cases the primary focus of disease, particularly in children, and that the "line of march" is from the root to the periphery.* In this connection one might specially refer to the pathological researches of such investigators as K. Preisich and Anthon Ghon, and to the clinical observations of radiographers, notably Dr. Lewis G. Cole, of New York, and Dr. Alfred Jordan, of London. K. Preisich in an article published in the *Weiner Medizinische Wochenschrift*, 1911, states that in children over eight years of age there are frequently found peribronchially disseminated lobular or confluent foci, while there is also found caseous infiltration starting from the hilus and spreading over the entire lobe, probably starting from the hilus glands and extending back along the lymphatics. Dr. Cole, in his excellent paper published July, 1910, in the *American Journal of Medical Sciences*, states, as the result of his radiographic experience, that it will be probably established that all pulmonary tuberculous lesions begin at the root and extend to the parenchyma. Dr. Jordan, whose original communications were published in the *Practitioner* and *British Medical Journal*, in February and August, 1912, states categorically that chronic pulmonary tuberculosis does not generally commence at the apex, but begins at the roots and extends along the branchings of the large bronchial tubes. He believes that the tuberculous process generally spreads by bronchopneumonic extension in the peribronchial tissues, and that these deposits in favourable cases cicatrise into fibrous bands appearing as dark radiating shadows on X-ray examination of the affected lungs. He further believes that the disease reaches the apex by way of the ascending bronchiole, and, when the apex is reached, the disease may there progress rapidly, so that the apex appears clinically to be the chief seat of the invasion, the primary disease at the root being so deeply placed as to escape detection by the ordinary methods of clinical examination. Another English radiographer—Dr. Bythell—goes so far as to state that in children pulmonary tuberculosis invariably starts at the root of the lungs. In a paper communicated to the Royal Society of Medicine in 1913, he stated that out of 300 successive cases of pulmonary tuberculosis in children examined both clinically and radiographically, he had never seen a single case in which the disease had not obviously originated in the hilus of the lung, nor met with one in which the sole or even the primary lesion had been at the apex. Whenever there was found an apical lesion there was

---

(*a*) Paper read before the Section of Medicine, International Congress of Medicine, 1913.

in every case revealed by the X-rays a far more advanced lesion at the root of the lung, which had escaped detection by the ordinary clinical methods of examination, but was clearly indicated by definite mottling and nodules in the region of the hilus.

During the past few years the author has conducted a series of clinical and pathological investigations in conjunction with radiographic examinations, and his results strongly support the contention that chronic pulmonary tuberculosis in the large majority of children and in a considerable portion of adults starts at the root of the lung and involves the central area long before there is any apical deposit. The accompanying radiograms and pathological specimens (here shown) are taken from illustrative cases.

The evidence in support of hilus tuberculosis is threefold—(1) *radiographic*, (2) *pathological*, (3) *clinical*. In no department of medicine has modern (and particularly instantaneous) *radiography* proved of greater value than in elucidating the origin, site and progress of chronic pulmonary tuberculosis. There is still considerable divergence of opinion as to the exact interpretation of the various root shadows and lung mottlings revealed by the X-rays. It is impossible in the space at the author's disposal to go fully into this question, which has been referred to in detail in his published papers already alluded to. The general conclusion is that certain types of root shadows and of grouped mottlings are definitely significant of old or recent tuberculous deposit, which can be readily traced as passing out from the roots into the deeper portions of the lung tissue and extending outwards towards the apex and other portions of the periphery. (Illustrative radiograms here shown.)

The *pathological evidence* of the spread from the hilus is in the nature of the case necessarily scanty. It is rare for patients to die in the early stages of pulmonary tuberculosis when the disease is limited to the root area. In most cases when death supervenes the lungs are generally infiltrated throughout, so that it is practically impossible to tell from the appearances present whether the disease started at the root or the periphery. Still, occasional cases have arisen (and will be forthcoming more and more as time goes on) when the patients have died from some intercurrent disease or complication, and where the pathological evidence has strongly supported X-ray findings. It is not at all uncommon to meet post-mortem with instances of extensive disease more or less limited to the root area, while the apices and peripheral portions of the lungs may be wholly or comparatively free from tuberculous infiltration. (Specimens shown).

The *clinical evidence* of hilus tuberculosis is necessarily also somewhat indefinite. Every physician, however, has had experience of a large number of cases with suggestive symptoms of pulmonary tuberculosis, but no definite physical signs. There may be only a slight cough accompanied by some degree of failure of health. Certain symptoms are suggestive—obstinate dry cough, slight hæmoptysis, tightness in the chest, wheezing (so-called asthmatic) attacks in children, occasional evening rises of temperature, and increased pulse frequency, in conjunction with a varying degree of anorexia, languor, anæmia, debility, and loss of weight. Such symptoms lead one to suspect the existence of some disease in the central portions of the lung adjoining the hilus, which is too deeply situated to produce definite physical signs. Even when there is no change in the percussion note and no marked alteration in the character of the vesicular murmur, one may get in a certain proportion of cases an area in the interscapular region, close to the root of the scapular spine, where one may find some impaired percussion, harsh breathing, prolonged expiration, and increased voice conduction. The presence of persistent rhonchi, particularly if localised, in a patient with failing health often indicates central tuberculosis spreading from the hilus. If such cases are at this stage submitted to X-ray examination characteristic root shadows and mottling are generally extremely prominent, and although at this stage there are generally no tubercle bacilli in the sputum, the diagnosis may be confirmed by tuberculin reactions.

Mode of Extension of Hilus Tuberculosis.

There is considerable divergence of opinion as to the inter-relationship of tuberculous bronchial glands and hilus pulmonary tuberculosis. In a number of cases the infection seems to spread directly to the lungs from the caseous bronchial glands, often apparently by direct contact: it is, indeed, sometimes difficult to determine in a section through the affected lung where the caseous bronchial glands end and where the pulmonary tissue begins. The extension in the large majority of instances probably takes place along the perivascular and peribronchial lymphatics. The author has advanced the view which has since been supported by Dr. Bythell and others, that *the doctrine of the retro-impulsion of lymph goes far to explain the principal phenomena connected with the extension of tuberculosis from the hilus to the periphery.* The retro-impulsion of lymph is now a well-proved phenomenon, due to the researches of Bier, Sir Almroth Wright and others, the back-flow of lymph taking place along the distended lymph channels, the valves of which are no longer competent. It is obvious that the terminal lymph channels discharging into the bronchial glands must contain numbers of bacilli and other bacteria derived from the various portions of the broncho-pulmonary tract. As long as the glands themselves are healthy these bacilli will be adequately dealt with by the bactericidal action of the gland cells. After a time, however, it may be a period of years lasting from infancy to puberty—the bronchial lymph glands by becoming caseous and eventually calcareous not only lose their bactericidal properties but serve to block the lymph stream. As a result the afferent lymphatic vessel walls become distended, particularly at the terminal portions, so that the valves are no longer competent, and a slow backward flow of the lymph with its bacterial contents sets in. Consequently the tubercle bacilli already present in the sluggish backward flowing lymph stream, whether derived from the broncho-pulmonary tract or directly from the caseous glands, filter through the walls of the distended lymph channels and set up a broncho pneumonic process in the surrounding pulmonary tissue. As these inflammatory areas heal up and cicatrise, the terminal lymph vessels become still further obstructed by the surrounding cicatricial tissue, and so the filtering, inflammatory, and healing process is repeated a little further out, the extension taking place slowly and steadily from the root towards the periphery and mainly in the tissue immediately surrounding the bronchi and pulmonary vessels. The whole process is, as a general rule, so extremely slow (in the absence of accidental contingencies producing autogenous infection) that there is, as a rule, plenty of time for protective antibodies to be formed in the system, and for immunity to be gradually established. In this way the hilus tuberculous infiltration in the great majority of cases entirely heals and cicatrises, while the increased phagocytic and bactericidal efficiency of the blood and tissues prevents the access of fresh, living bacilli from without. This theory of immunity affords a rational explanation of the fact that although according to Hamburger and Monti 94 per cent. of the population under 14 years of age have actually been infected with tuberculosis, fully 80 per cent. of these never exhibit symptoms or signs of manifest disease.

It is quite otherwise in advancing cases, where there is a constant liability to accidental contingencies involving autogenous infection, particularly in the later stages. If the disease progresses, the apices may become affected either by a gradual direct extension from the hilus along the peribronchial and perivascular lymph channels, or independent foci may be formed, due to aspiration broncho-pneumonia (*e.g.*, by bronchial embolism of infected particles detached from an open lesion), or as the result of autogenous blood infection. *Hilus tuberculosis in the early stages is a "closed" disease, the bacilli being confined to the hilus glands and the peribronchial pulmonary tissue.* In the latter stages accompanied by caseation, ulceration of the walls of the bronchi and bronchioles occurs, with the result that tubercle bacilli are discharged into the lumen of the bronchi, where they mix with the bronchial secretion which is partly expelled in the expectoration and partly aspirated in the act of forced inspiration into the remote terminations of the bronchioles, where the bacilli may directly induce foci of bronchial pneumonia.

In a certain proportion of cases there is little doubt that *primary peribronchial deposit* takes place as isolated foci as the direct result of the lodgment on and penetration of the bronchial mucosa by bacilli derived from without in the act of inhalation. These foci are probably, however, comparatively few in number, as the great majority of the inhaled bacilli are passed on by way of the lymphatics to the root glands. Each such focus may be of considerable importance, as, however quickly it may heal up, it may, by providing a suitable culture nidus in living tissue, serve to materially reinforce the virulent activity of the originally inspired bacilli, few of which probably in their original active state succeed in surviving the passage through the various lines of defence on their way to the root glands. It is the perivascular and peribronchial interstitial rather than the pulmonary tissue proper which is mainly affected in this very early stage, when the lymphatic exits to the glands are freely open and the glands themselves functionally active. The finer radiating hilus streaks seen with the X-rays even in healthy children may have originated from a fibrous transformation of this small-celled perivascular and peribronchial connective tissue infiltration. On the other hand, the mottling, blotching, and other evidences of gross hilus lesions are probably later phenomena, associated with stagnation, or backward flow of lymph consequent on the blocking resulting from glandular disease, whether active or quiescent.

Amongst the important *sequelæ* of hilus tuberculosis may be mentioned *chronic fibroid phthisis*, which is in reality its final stage. *Tuberculous pleurisy*, whether dry or accompanied by sero-fibrinous effusion, may also be traced to the same cause: Sir William Osler indeed states that, in almost every instance of tuberculous pleurisy, there are tuberculous foci in the bronchial glands, and it may be added that in every such case radiography will reveal definite hilus changes. The author, while house physician at the Brompton Hospital for Consumption, noted the large proportion of patients with physical signs of chronic pulmonary tuberculosis, who gave a history of an attack of pleurisy six, eight, or more years previously. The exact number of years represents the time required for the slow spread of hilus disease from the root to the periphery of the lung.

A large proportion of cases of so-called *asthma in children* may be traced to reflex or direct irritation from enlarged, often tuberculous, bronchial glands, and peribronchial thickening and infiltration. The lungs of such children suffering from asthmatic attacks if examined by X-rays generally present unusually well-marked hilus shadows, and not infrequently dark discrete areas indicating calcified glands. In adults also asthmatic attacks are undoubtedly in some instances associated with hilus tuberculous thickening. A certain proportion of cases of *acute miliary tuberculosis* are the direct result of systemic infection due to penetration of branches of the pulmonary veins by caseating bronchial glands.

As regards the *diagnosis of hilus tuberculosis*, it should be made a definite rule for all children and young adults with persistent cough accompanied by anæmia, lassitude, pyrexia, or other signs of failing health, to be submitted without delay to an X-ray examination. The value of early diagnosis of hilus tuberculosis cannot be over-estimated. The late Dr. Gee was of opinion that "If physical signs of Pulmonary Tuberculosis were present the probabilities were against complete recovery; but if the disease were detected before this there was hope that it might be cured." This statement is as true now as it was twenty years ago. By means of modern instantaneous radiography we are now enabled to discover deep-seated central tuberculous disease in the hilus and surrounding pulmonary tissue before tubercle bacilli appear in the sputum and long before physical signs manifest themselves.

The *prognosis* in the early stages is extremely good. Indeed, the earliest stage of hilus tuberculosis is one of the most curable of all morbid conditions, as is proved by the fact that the great majority of all lungs exhibit post-mortem evidence of healed tuberculosis in the root area, whether in the form of calcareous deposit or fibrous thickening. In the case of the hilus tuberculosis not strictly confined to the root area, but extending into the immediately surrounding pulmonary tissue—the peri-hilus—the prognosis is also very favourable if the patient's environment is a suitable one. It is only when the disease has reached the apex or other portion of the periphery that the outlook becomes much less hopeful, as the apical lesion is but too often associated with advanced central disease of which it is but an extension. Generally speaking a good prognosis mainly depends upon three factors (*a*) the early diagnosis of the morbid lesion, (*b*) the degree of resistance of the individual, and (*c*) the nature of the patient's environment. The ubiquitous tubercle bacillus probably obtains lodgment in the pulmonary root area of each and all of us sooner or later, and yet in over 80 per cent. of individuals the natural resistive power of our tissues is sufficient to effect a permanent cure. That environment as well as heredity plays an important part is proved conclusively by the fact that pulmonary tuberculosis claims its victims mainly from the poorly fed, poorly clothed, and poorly housed members of the community. The fact that most of us have had at one time active tuberculous deposit now represented by calcified glands or fibrous thickening of the roots may in reality be an advantage in view of our having to live constantly in a microbic environment. A definite degree of immunity due to the presence of anti-bodies has thus been gradually established during childhood, and we are actually in a better condition as adults to resist any future invasion than if we had never contracted the disease at all. It is probable, indeed, that the gradual reduction of tuberculosis mortality in civilised countries is largely due to the fact that the population has become gradually immunised in this way. Such a theory will serve to explain the alarming increased mortality from pulmonary tuberculosis when the disease has become endemic among the native adult populations of Bengal, the West Indies, and elsewhere when the inhabitants have not thus become immunised.

With reference to treatment little need be said under this head, except to emphasise the importance of commencing treatment at the earliest possible stage of the disease. Successful treatment is thus intimately linked up with the question of early diagnosis.

Dr. Gee's aphorism that "therapeutics must begin before physical signs are developed, and if you wait for physical signs you wait too long," exactly sums up the situation.

It is the characteristic X-ray appearances in conjunction with a confirmatory positive tuberculin reaction to which we must trust in deciding when to commence treatment.

It is in these cases of early hilus tuberculosis that carefully administered tuberculin treatment achieves its most signal triumphs. The increasing thereby of the protective properties of the blood and tissues at this stage will serve in most cases to completely check further progress of the disease and pave the way to a permanent cure. This is particularly so in the case of glandular tuberculosis in children. This is the time for strengthening the resistive power of the organism, whether by hygienic methods or by specific tuberculin treatment, or better still, by both methods combined.

The universal recognition by the profession of the importance of hilus disease and its early diagnosis may inaugurate a new era in the treatment of pulmonary tuberculosis.

The late Dr. Louis Merck, whose death occurred last week, was head of what is probably the oldest established chemical factory in the world—namely, that of E. Merck, of Darmstadt. The business was founded in 1668 by Friedrich Johann Merck, and has since remained in the uninterrupted possession of the family. The firm was one of the earliest pioneers in the production of alkaloids, being the first to supply cocaine on a commercial scale. It also held the monopoly in the manufacture of santonin about thirty years ago.

THE NECESSITY FOR STATE ENDOWED HOSPITALS AND A STATE MEDICAL SERVICE. (*a*)

By J. C. M'WALTER, M.A., M.D., D.P.H., LL.B.

The voluntary hospital system is dead. It had an honourable career, and marvellous success. Our only complaint is that the good is the enemy of the best. If it had not been so good, a better system would have come into operation much sooner. Hospitals were originally lodging-houses for pilgrims and strangers, conducted by members of religious orders. Hospitality, not cure of disease, was the dominant idea of their promoters. At this period of the world's history nobody supposed that a sick person would be better off anywhere than in his own home. In this connection certain pilgrims who took ill on their journeys were kept in these hostels, and finally an infirmary became a necessary part of the institution. All the time the idea was essentially charitable, and the expenses of the good work were met by the alms of the faithful. In time of plague or other epidemic the hospitals were probably used as places of detention for persons who might be a danger to the community. It became the rule that if any member of the religious order was skilled in medicine, he should attend the patients. If no such person was available, the nearest physician might be called in to attend. This was the germ of the modern hospital. St. Bartholomew's and Bedlam, St. Thomas's and Bridewell, all were founded thus. In later years various pious donors left legacies to the hospitals, and boards of trustees were founded, but the paramount principle was one of charity and philanthropy.

These ideas are out of date. The State, while spending £14,000,000 a year on combating sickness, cannot allow the most important part of the work to be at the mercy of the pious donors to hospitals. A few beds in a healthy house, perhaps a nurse or two, and an occasional visit from a doctor, constituted the idea of an hospital treatment up to half a century ago. Now, all the resources of architecture are lavished on the buildings, these costing up to nearly a thousand pounds per bed. They must contain the most elaborate bacteriological, radiological, and pathological laboratories. Teaching, curing, research, must all be carried on by eminent experts within their walls. A modern hospital is, in fact, a scientific university, comprising the highest teaching in every branch of science, as well as the most modern application of art to the cure of disease. A few years ago, Dr. Jordan Lloyd tells us, 3 per cent. of the population of Birmingham were treated in hospitals. Now over 11 per cent. are so treated. It is calculated that about a million operations are performed in the hospitals of Great Britain and Ireland every year. Will anyone suggest that this work will become lessened for the future? Or will it be argued that it must be done gratuitously?

At the Health Congress held in Berlin last year we were shown over the new Virchow Hospital. It cost practically a million of money, to say nothing of a yearly cost of £67,000. It spread over 67 acres, and held nearly 2,000 beds. The number of doctors attached was 157, and of employees about 1,100. This really is the type to which all modern efforts in hospital providing must approach. There is also in Berlin another hospital—The Charité—which is largely of a modern character, and is kept up by private donations. This serves for clinical teaching, which, we were told, is not permitted in the Municipal Hospital. The Berlin system seems to be one which might easily be adopted by British municipalities—at least, with an easy amendment of our Public Health Acts. It is estimated that the cost of each bed is three shillings per day, and for every patient three shillings must be found somewhere. Either the patient pays himself, or his insurance society pays for him, or the province from which he comes pays, or, in the last resort, if he be utterly helpless, the poor relief organisation pays for him. Now every sanitary authority can erect, endow, or maintain all hospitals with necessary equipment for infectious diseases. By an easy extension of this Act they might erect and endow hospitals for all diseases, or they might make bargains with the directors of such hospitals for the upkeep of patients. A defect of the Berlin system is that where the municipal authorities erect an hospital it is frequently unavailable for clinical teaching. It may, moreover, be limited in its freedom of medical research by the prejudices of the uninstructed community. If the hospital be not available for the training of students and practitioners, for medical research, and for the training of nurses, its utility to the community is greatly diminished.

There seems little doubt that insurance societies will for the future insist on patients getting hospital treatment as much as possible with a view to taking them off the benefit list. In such cases the society must be made to pay a fair proportion of the hospital expenses. The problem, then, is this. Obviously the State must contribute to the upkeep of hospitals; but in every city there are admirable hospitals superintended by boards of trustees in whom the public have often more confidence—and who are, perhaps, better served by their officers—than any merely State institutions. These would refuse to be wiped out by Act of Parliament, and to do so would be costly and unpopular. Clearly, the better plan is to let the State hand over to the trustees of a hospital a certain sum per day for every patient occupying a bed. By the State I mean also the local sanitary authority. A certain amount of control, a certain minimum standard of service and efficiency would, of course, be insisted on, but the financial burthen of the hospitals would be greatly lessened. The sum would probably be between three and four shillings a day. This would not represent the entire burthen of the patient, for the people are entitled to the benefit of whatever endowments a hospital has already.

Modern discoveries for the treatment of disease—light cures, electric cures, mechanical apparatus, diagnostic methods, vaccines, serotherapy, and the services of specialists in every department of medicine would then be available, not as a charity, but as a right, to the sick citizens. If each bed were paid for, whether by the sanitary authority or the insurance societies, then an insured person would be offered, in return for his weekly contribution, not merely the perfunctory services of the panel doctor, but all the array of a modern scientific hospital and its equipment, to cure his disease. That the State must endow hospitals, directly or indirectly, will not surely be denied, but the arguments for a State medical service are not so conclusive. We have now 14,000,000 persons receiving medical benefits under the Insurance Act. What does this mean? Simply that each person is on the "panel" of some doctor whom he happens to like. He treats his patients exactly as he chooses—it depends on his honour, or his humanity, or on his sense of what is profitable. He has no superiors and no criterion. He is welcome to treat the patient as indifferently as he fancies—provided he

---

(*a*) A Paper read before the International Congress of Medicine, London, August, 1913.

can escape actual censure for grievous wrong doing. If he has the patient's confidence he can do as he wishes; nothing can touch him. This, at least, has its advantages—it somehow fits in with British ideas of freedom of contract, but obviously it cannot last. We cannot continue to have fourteen millions of persons treated, as it were, by the privates of the profession, and at their sweet will. It would be as though all the hospitals in the three kingdoms were at the tender mercies of the house surgeons alone, with never a consulting surgeon or physician to come near the place. Specialism is the order of the day—it makes for excellence, and there is no proper provision for specialists in the existing condition of affairs.

It is unthinkable that the present ill-organised crowd of 14,000 doctors, without hierarchical organisation, who at present administer the Insurance Act can be allowed to continue their labours without being digested into a more uniform organism. The State simply must create a special service. There must be organisation, control, hierarchical order. The obvious scheme would seem to be one founded on the Army Medical Service model—that is, entrance by competitive examination—various grades of control and command, repeated examinations, as tests of efficiency and for promotion. Individuals need not be crushed out by a State medical service—the healing science has always charms as well as rewards for earnest effort.

The recent amalgamation of St. George's and Westminster Hospitals, and the sale of the ground on which St. George's stands, for the colossal sum of £480,000, shows what staggering sums are locked up in certain old-fashioned bodies of trustees. The State could, perhaps, in the course of time, institute an investigation into the financial conditions of many of such institutions and ascertain whether more good could not be done by amalgamation, sale of previous sites, better treatment of the hospital staffs, limitation of the number of posts, and other points.

RELATIONS OF ANÆMIA TO ACHYLIA AND GASTRITIS CHRONICA. (a)

By PROFESSOR KNUD FABER.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

FENWICK has first shown, in his well-known work of 1880, that in pernicious anæmia we find a complete achylia gastrica with anatomical changes in the gastric mucosa, and especially inflammation and atrophy of the glands. Later on, this state of things has been ascertained over and over again. It may be laid down as a fact that in all cases of pernicious anæmia an achylia is constantly found. The two or three cases in which the gastric secretion was still maintained did not conform to type with regard to the proportion of hæmoglobin to red corpuscles and the course of the disease.

To begin with, the gastric disease was looked upon as being the cause of the anæmia; thus William Osler in 1886 and Kinnicut in 1887; but little by little another opinion has prevailed. The achylia is sometimes regarded as the sequel of pernicious anæmia, or more often the achylia and anæmia are regarded as two concomitant phenomena due to the same cause, which is thought to be either a general toxic poisoning or an infection. Especially Hunter is known to hold the latter view.

If, however, we look into Osler's and Kinnicut's observations we find that symptoms of gastritis appeared long before the appearance of anæmia; and in Osler's case the ætiology of the gastritis was quite clear, the gastritis being due to alcoholism. Later observations, too, have shown that the presence of the symptoms of gastritis a rather long time before those of anæmia is a frequent occurrence. These observations, however, are not conclusive, as a concurrent examination of the gastric secretion and the blood at this early stage is wanting. I have been so fortunate as to have had under my observation three cases of pernicious anæmia in which a complete and chronic achylia had manifested itself several years before any anæmia whatever existed in the patient. Indeed, 3, 8 and 10 years respectively before the appearance of the typical and fatal pernicious anæmia, a normal quantity of hæmoglobin and a complete achylia were shown in these three patients.

CASE 1.—Man of business, æt. 30.

In 1903, achylia found for the first time and also symptoms of glossitis. In 1907 and 1908, achylia found again and normal quantity of hæmoglobin. In 1911, typical pernicious anæmia with hæmoglobin 22 per cent. and 840,000 red corpuscles (index 1, 3). Death.

CASE 2.—Solicitor, æt. 55.

In 1909, achylia and hæmoglobin 100 per cent.; 1910 and 1911, same condition. In 1912, typical pernicious anæmia; hæmoglobin 30 per cent.; red corpuscles, 1,000,000 (index 1, 5). Death.

CASE 3.—Man of business, æt. 54.

In 1902, achylia; hæmoglobin 95 per cent. In 1910, still achylia, light anæmia (60 per cent.). In 1912, typical pernicious anæmia; hæmoglobin 30 per cent.; red corpuscles 900,000. Death, 1913.

Considering that no case was ever seen of achylia developing secondarily during the progress of pernicious anæmia, and comparing the above cases with the observations of Osler, Kinnicut, and others, it may be laid down as a fact that the chronic gastritis with achylia was present primarily, and that pernicious anæmia appeared as a sequel, or rather, perhaps, as a complication of the former. This opinion is further supported by the fact that in patients suffering from chronic achylia there will often appear anæmia of a lower degree and a more benign type, so that pernicious anæmia is out of the question.

By examining a rather large number of in-patients from this point of view, very illustrative results are arrived at.

Thus I can give information about 207 cases of chronic achylia treated at the University's Hospital of Copenhagen. Of these, 22 were suffering from pernicious anæmia, and no less than 37 showed lighter anæmia having a percentage of hæmoglobin from 80 to 50 and below. Fifteen of these showed a percentage of hæmoglobin below 50, and yet pernicious anæmia was quite out of the question, the red corpuscles having sunk only to from three to four millions, which placed the colour index considerably below one, a condition the very reverse of that found in pernicious anæmia. Furthermore, these cases of anæmia did not tend towards progression, though not towards curing either. In spite of proper treatment one may see them keep their anæmia rather unchanged through years. Some of them I have followed for seven years, always finding a percentage of hæmoglobin of from 40 to 60 and about 400,000 red corpuscles. Most of all they resemble pertinacious chloroses, but are specially characterised by the constant presence of achylia accompanied by its frequent diarrhœa and dyspeptic symptoms. As is the case with pernicious anæmia, chronic achylia should, in these cases of lighter anæmia, be looked upon as the primary lesion.

(a) Paper read before the Section of Medicine International Congress of Medicine, London, 1913.

The cause of the chronic achylia is a chronic gastritis. Formerly too much stress was laid on the atrophy of the mucosa so frequently met with in this gastritis. The atrophy should only be regarded as a final result of the gastritis. The more prolonged the gastritis and the achylia the more pronounced the atrophy. If the patient for years has shown symptoms of gastritis and then gets a pernicious anæmia the *post-mortem* examination will show extensive atrophy, but if the anæmia kills the patient before the gastritis has existed for a long time, say a year or so, the mucous membrane will show extensive inflammatory processes, but no atrophy. The peptic glands are well preserved, but they have ceased their functions; there is complete achylia without atrophy. As Lubarsch, we might designate the disease as a *gastritis progressiva atrophicans.*

Thus it is not the anatomical changes themselves we have to look to for the cause of the anæmia, nor to anatomical changes of the intestinal tube, which is found to be quite normal in spite of a pronounced pernicious anæmia. It is also difficult to attach any direct importance to the glossitis of Hunter. Glossitis with pains, tenderness, and redness of tongue occurs very early in achylia, but it seems mostly to be a phenomenon concomitant with the gastritis, for in one of my patients it was found clearly defined along with the achylia nearly eight years before the patient got his pernicious anæmia of which he died.

The most likely ætiology at this moment seems to be the one that seeks the origin of anæmias in the chronic achylia itself, which supplies the soil in which the anæmia develops. It is of special importance that in case of achylia the stomach loses its power of disinfecting its contents. Duodenum is sterile no longer, and quite an abnormal and luxuriant flora develops in the intestinal tube. Maybe, an infection is thus caused; maybe, there is only a development of hæmolysins of bacterial origin in the intestinal tube itself. By their absorption into the blood the hæmolysis arises which is so decidedly present, especially in pernicious anæmia, and to which Hunter so early called our attention.

THE MEDICAL TREATMENT OF PILES.

By CH. DUBA, M.D.,
Of the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

I have treated upwards of three hundred cases of piles with very great success on the lines which I propose to describe. This treatment may conveniently be divided into—(1) internal; (2) external; and (3) general.

Internal treatment.—During the stage of acute inflammation the patient is to be given, daily, for three days:—

Linseed tea (10 per cent.), 2 pints.
Glycerine, dr. vj.

This is taken in wineglassfuls, and on the second day some relief will already be experienced. If the state of the kidneys allows of it, we then order him:

Salicylate of soda, gr. viij.
Bicarbonate of soda, gr. viij.
Exalgine, gr. iss.

in one cachet. One to be taken before each meal.

If, after taking twenty of these cachets in conjunction with the general and external treatment, recovery has not taken place, we must go back to the linseed tea for three days, then resuming the cachets. I have very rarely found it necessary to repeat the internal treatment. As a rule, at the end of three weeks I discontinue the internal treatment, merely continuing the external treatment until the disappearance of the hæmorrhoids.

External treatment.—Every day two sitz baths at 102° F., containing a pound of sodium chloride. To remain in for half an hour. A pint enema of decoction of marsh-mallow—if this can be given; if not, apply five or six leeches round about the hæmorrhoidal swelling. After the enema or the leeches, paint with:—

Hydrochloride of cocaine, gr. viij.
Extract of belladonna, gr. xv.
Extract of hyoscyamus, gr. xx.
Glycerine, dr. iv.
Misce. Fiat pigment.

Cover with a moist dressing which, in its turn, is covered with protective. After three days, when the inflammation has subsided, apply the following lotion:—

Calomel, gr. lxxx.
Solution of adrenaline (1 per cent.), dr. iiss.
Lime water, fl. oz. v.
Ft. lotio.

Steep a pad of lint in this solution, and apply for from three to five minutes to the piles previously smeared with the glycerine preparation, to be repeated every morning. Then powder with the following, every evening:

Oxide of zinc, oz. iss.
Powdered opium, gr. lxxx.
Naphthol B., dr. iiss.
Misce. Signe "The Powder."

Every morning, after applying the lotion, cover the piles with a moist dressing and a piece of protective. Although the morning lotion and evening powder may appear to be rather caustic in spite of the previous application of glycerine, not one of my three hundred patients ever declined to go on with the treatment on account of pain; indeed, several assured me that the pain, such as it was, did not amount to anything, and seemed to relieve the suffering caused by the piles.

Dietetic and hygienic treatment.—(a) Three days' strict milk diet; ten days' lacto-vegetarian diet, then ordinary regimen. (b) Complete rest on the back with the feet raised. After a time the patient may be allowed to lie in whatever position he pleases, and lastly, he may take a little exercise. With an obedient patient it is rarely necessary to forbid exercise after the thirteenth day, by which time all inflammation will have subsided. By means of this simple treatment, for it is simple enough although as described it may seem complicated, I have been able to spare my patients many an operation. Here are notes of two or three of the cases thus treated.

Cases.—A man, age 45, weaver, complained of severe anal pain for three weeks. He lost blood, but there was no pus. Loss of appetite, insomnia and rapid wasting, yellowish complexion. His doctor suspected cancer. I found a large, violet, smooth, oozing mass obstructing the anus, rendering rectal examination impossible. For the past twenty years he had had slight bleeding from the anus every ten or fifteen days. He was anxious to be operated, but I suggested that he should give this treatment a trial before deciding. The treatment was applied in its entirety except that no enemas or leeches were employed, and in three days there was marked improvement. After ten days the patient wanted to return to work. In five weeks recovery was complete. Between 1897 and 1904 this patient had no return of his piles.

A paralytic, 72 years of age, had itching and pain in the anus, which prevented sleep and caused discomfort when sitting. He was very depressed. He had been suffering thus for six years. Round about the anus were six small reducible swellings, which oozed a good deal. He had myocarditis and arrhythmia, slight hypertrophy of the liver, albuminuria and obstinate constipation. He underwent the treatment except that, in view of the state of his kidneys, rhubarb and bicarbonate of soda were substituted for the salicylate of soda, and the enemata were also dispensed with. Recovery was brought about in six weeks, and he never suffered from piles any more down to the date of his death.

A clerk, æt. 26, had been suffering from attacks of bleeding every two or three days for six weeks, and the repeated loss made him so weak that he was constrained to keep his bed. He was markedly anæmic. He had had anal pain ever since he was 18 years of age, and this was accompanied by attacks of muco-membranous colitis. Round the anus were several irreducible tumours, effectually preventing movement of any kind. The entire treatment was applied, with immediate relief. He was able to leave his room on the tenth day, and three weeks later the piles came away. It is now twelve years since he was treated, and there has been no return.

I venture to suggest that whenever the practitioner is dealing with a case of hæmorrhoids for which surgical operation appears indispensable, a trial should be given to this treatment, which will often, if not always, dispense with the necessity for bloodshed. Moreover, operations on the rectum expose the victim to certain disagreeable sequelæ, especially when the operation is done by comparatively inexperienced persons, and in private practice where hospital facilities are not available.

OPERATING THEATRES.

LONDON TEMPERANCE HOSPITAL.

Operation for Tuberculous Pyosalpinx and Dermoid Ovarian Cyst.—Mr. Herbert Paterson operated on a woman, æt. 37, who had had a sinus discharging pus from the pelvis for over three years. In March, 1910, the patient had had an attack of "peritonitis," accompanied by vomiting and acute pain in the lower abdomen. The attack lasted five weeks, during which time she had a slightly raised temperature. She was admitted into the hospital in July, 1910. The patient was very ill, having a temperature ranging between 98° and 103° F., and there was a fixed, round, hard swelling in the hypogastric and right iliac regions. A diagnosis of tuberculous pyosalpinx was made, but it was decided to wait and see if the temperature would settle down before an operation was performed. Under rest in bed and open-air treatment the patient's condition slowly improved, and at the end of August the abdomen was opened. After separating much matted intestine, a swelling, about the size of an orange, was found on the right side of the uterus, apparently connected with the right tube. Removal of the swelling was impossible, so it was opened, allowing the escape of much offensive pus; a drainage tube was tied into the abscess cavity and brought out at the lower angle of the wound. Patient was very ill after the operation, but eventually made a good recovery and left hospital with a sinus leading into the pelvic cavity.

After leaving hospital the sinus continued to discharge pus, and the patient was treated with tuberculin injections. A year later the patient was readmitted, and an attempt was made to induce the sinus to close by making an opening into the lower end of the sinus from the vagina. Later, several attempts were made by scraping the sinus and by treatment with a vaccine, but without success. As the discharge of pus caused the patient a lot of annoyance, she was admitted again for further treatment. An incision was made in the abdomen above the sinus. On opening the peritoneal cavity it was found that the small intestine was adherent to the abominal wall round the sinus. An encircling incision was made round the sinus, clear of the adherent intestine. Mr. Paterson then carefully separated the intestine from the abdominal wall. The walls of the sinus were found to be formed entirely of adherent intestine. This intestine was carefully separated from off the sinus and was found to extend right down to the rectum. A portion of the right tube was removed, and the cyst which was found on the left side of the abdomen was also removed, together with a portion of the tube on that side. The peritoneal and muscular coats of the rectum were torn and sewn up. The separated portions of the intestine which had formed the walls of the sinus were much thickened. They were swabbed with Harrington's solution and absolute alcohol. A tube was placed in Douglas's pouch, the wound being sewn up in three layers, thread for peritoneum and fascia, silkworm gut (subcuticular continuous suture) being used for the skin. Three interrupted silkwork gut sutures were placed at intervals, being tied over a strip of gauze dressing. The cyst removed proved to be a dermoid, containing a well-formed tooth.

Mr. Paterson pointed out that the opening up of sinuses such as this, the walls of which were formed entirely of intestine, was a serious operation, and should be undertaken only after a very prolonged and thorough trial of less severe measures. In this case many attempts had been made during the previous three years to secure healing of the sinus, and it was only at the patient's urgent request, because the offensive discharge from the sinus prevented her from earning her livelihood, that the operation was undertaken. The operation findings showed that there was little prospect of a cure being obtained without operation. The tubes were extensively diseased, and the thickened abscess walls left from the previous operation showed little signs of healing. The chief danger in such cases was the risk of damaging the small intestine in separating it from round the sinus. Fortunately in this case no untoward results ensued.

The sinus continued to discharge a considerable amount of pus, and at times the patient's temperature rose to 100° F., but after the sinus had been filled up twice with bismuth paste it healed up, and the patient left hospital after a stay of about six weeks.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, September 27th, 1913.

At the Gesellschaft für Psychiatrie und Nervenkrankheiten, Hr. Forster showed

Spirochætes from Cerebral Puncture Fluid of Paralytics.

The spirochætes were obtained from two cases of paralysis. In both preparations which were stained by the Fontane-Tribondeau method the typical germs were found. The speaker had now examined the cerebral puncture fluid of 16 cases of the disease. In four of them, in the dark field living spirochætes could be seen. In the last case but one masses of the germs were seen perhaps as many as would be met with in a primary sore; in the last case of all they were numerous, but there were not so many living forms. The dark field preparations were dried and stained and were the ones shown. The first case in which the speaker had demonstrated living spirochætes was now dead. The *post-mortem* examination showed the case to be one of typical progressive paralysis. No signs of cerebral syphilis were to be seen at the examination. A number of spirochætes were found, however, in a smear preparation made immediately after the *post-mortem* examination had been made.

The examinations showed that the spirochætes were really present, and that what was seen was not nerve fibrils stained by silver. The cerebral punctures were not made for the purpose of ascertaining whether spirochætes were there, but for the purpose of inoculation in order to determine whether the fluid was still capable of causing infection, and to determine whether the paralysis was due to some special form of spirochæte.

No spirochætes had hitherto been found in the ventricular or lumbar fluid of such cases, not even in the one that yielded such abundance in the cortex.

Hr. Henneberg remarked that it was possible that spirochætes might be found in non-paralytic cases of old-standing syphilis. It would be interesting to learn the condition of the brain in such cases, *i.e.*, as regarded the presence of spirochætes.

Hr. Bonhoeffer said that puncture of the brain of paralytics could not be recommended for diagnostic purposes, but it was done in the speaker's cases in order to ascertain whether living and infective spirochætes were present.

Hr. Kramer showed a case of

Friedreich's Disease with Myosthenic Reaction.

The patient was a youth, æt. 18, with no hereditary taint. When 7 or 8 years old, contraction of the fingers of the left hand began, and a year later those of the right hand. Gradual curving of spine followed. Three years ago the speech changed and the gait became uncertain. The pupils reacted and there was no nystagmus. The speech became monotonous and scanning. There was no other evidence of cerebral disease. The fingers of both hands had the claw position. The inter-ossei were not atrophic, they reacted normally to electric stimuli. Ataxy of the arms, kyphoscoliosis. Wide ataxic gait. Ataxy of the legs in the supine position. Patellar and Achilles tendon reflexes absent. Bilateral Babinski's sign. The skin reflexes and sensibility were normal. There was a more or less pronounced myasthenic reaction in all the muscles to the Faradic current both direct and indirect. No tiredness to be determined by the galvanic current nor was there any from voluntary movement. The most pronounced was the myasthenic reaction in the region of the peroneus. With prolonged Faradic stimulation a powerful tetanic condition was brought about. After a short time this ceased and gave place to one of moderate individual contractions; after a few minutes the muscle was quite exhausted and only occasionally showed a few individual twitchings. Interruption of the current even for a few seconds restored the tone mostly, but the contractions were less strong and more easily exhausted than before.

Hr. Schuster believed that the contractions of the fingers noticed were due not to any change in the joints or of the muscles, but to a contraction of the soft parts of the finger on the side for flexion such as was seen so commonly and especially in certain families. He had observed that there was a nervous peculiarity in families that showed the contracted fingers, and he would ask Hr. Kramer if other members of the family in his case showed anything similar. As regarded the hollow foot of Friedreich's disease, it had been pointed out that spina bifida was frequently associated wth the condition. For that reason he had all his cases of suspicious foot formation Röntgenised—that was, he had had the pelvis Röntgenised. He had come to the conclusion that not only was there a connection between the two, but that that connection was a causal one, and that the condition was due to some injury to the cauda equina or some lower part of the spinal cord.

Hr. Kramer, in reply, said that the hollow foot could only depend on loss of muscular power, but, at the same time, it was curious that the case he had just shown was also one of spina bifida.

AUSTRIA.

Vienna, Sept. 27th, 1913.

Treatment of the Fatty Disease.

The views regarding the ætiology and treatment of morbid adiposity have just been discussed by Dr. S. Hay, of Vienna. The fact was, of course, familiar to the old practitioners that there was a special tendency in some individuals to the accumulation of fat, and under conditions which in ordinary persons led to no such result. Cohnheim was the first to lay stress on the probable diminution of the functional oxidising power of the organism—at least in case of fats; and that defect was analogous to that present in diabetes regarding carbohydrates. But the most modern physiological exponents of metabolism, such as Von Noorden (Vienna) and Umber (Charlottenburg) are recognised to be, have adopted a completely opposite viewpoint. Indeed, Von Noorden states that he knows of no individuals or classes of the community who possess any congenital tendency to the morbid deposition of fat; his view of the ætiology of the condition being represented by excessive nutrition associated with insufficient movements. The fact that the members of the female sex in general show a much greater disposition to adiposity is regarded by him as the result of their greater liking for soft foods and their undeniably greater indulgence in rest, etc. The view of many authors that the sexual processes have also an influence cannot be wholly rejected, in presence of the fact that women often accumulate much fat during the enforced stillness of pregnancy, more especially during the latter portion of the term, when nutrition is so luxuriously provided and with so anxious care; and the subsequent lactation, when fluid nutriment is so copiously administered. The fatty accumulation which tends to follow the climacteric corresponds pretty closely to the increased fatty deposit in men after the age of 40.

Dr. Hay is so far inclined to agree with Von Noorden's theory, as the result of his researches tends to show that in every individual case of excessive fatty deposit there has been excessive administration of nutriment, liberal use of alcohol, insufficient bodily movements, or unnecessary prolongation of sleep—in short, that in each individual case the administration of nutriment was out of proportion to the bodily movements. Accordingly, he believes that this rule of due proportion between food and exercise must always be our foremost consideration in the management of the fatty disease. He passes in review the principal modes of treatment that have been recommended; and, while admitting the merits of some of the individual items, insists that lowering of the diet must always remain the chief factor. He dismisses the bleeding, salivation, and sweating procedures formerly so much in fashion, and proceeds at once to the examination of respective merits of the medications most strongly recommended. Foremost among these he places the thyroid preparations. These have an unquestionable oxidising influence on fat; but their effect on the albumin of the organism is by no means so beneficial, as is often seen in resulting faintness, palpitations, etc. Erythema is another of the inconveniences, and systemic intoxications are found to result in many cases. Thus great caution and foresight must be used in regard to the nervous and circulatory apparatus, especially when adopting this form of organo-therapy. And not less important is it to bear in mind, too, that in many cases after administration of thyroid preparations to fatty subjects, not only has glycosuria appeared, but diabetes has even been permanently established. Preparations of iodine, and especially iodide of iron, have been recommended. Salomon has made a special preparation, of which the principal constituent is the extract of fucus vesiculosus (bladder-wrack, 0.4 g. in each pastille), to which extract of tamarindus indica and of cascara sagrada have been added. But as symptoms have followed its use rather like those following the thyroid preparations, it cannot be regarded as a wholly harmless remedy. Danel has recommended scammony as a specific. Baths, when employed with due precautions, make a valuable adjuvant.

HUNGARY.

Budapest, Sept. 27th, 1913.

POTTS' DISEASE IN CHILDREN.

FROM an extensive study of the disease, as well as considerable experence in dealing with same, Aufricht draws the following conclusions (1) Tuberculous spondylitis is pre-eminently a disease of the young child. (2) The greatest number of cases is found between the ages of two and eight years. (3) In his hospital experience Dr. Aufricht met a greater number of boys than girls. (4) The duration of the disease before admission to the hospital was between a few weeks and nine months. (5) In the presence of undoubted predisposition, whether because of heredity or on account of surrounding conditions of life, measles, and at times trauma, may serve as the starting point of the disease. The complication of spondylitis by measles shows itself very rapidly in deterioration of the patient's condition. (6) The lumps were mostly found in the thoracic portion of the spine; the lower thoracic vertebræ were usually the most affected, and the curvature was generally limited either to these vertebræ or to the upper lumbar. (7) With the evacuation of the abscesses followed by filling up of the cavities with a 10 per cent. solution of idoform emulsion. or after a curettage done with the same aim in view followed by a hermetic closure of the opened abscess, satisfactory improvement would be observed in those localities where the skin has not grown thin. (8) Cases of active surgical interference and further treatment with drainage also showed a considerable degree of improvement, though the most frequent post-operative complication was usually a febrile condition. (9) Correct methodical extension and counterextension in bed often, in combination with suspension with the Sayre apparatus, is to be considered as the best means in the majority of cases, of checking development of the tuberculous process and of creating favourable conditions for the further treatment with corsets. (10) Besides the specific treatment it is absolutely necessary that resort be had to favourable climatic surroundings, as in special sanatoria at the shore of the Adriatic, or on the mountains, but never at a hospital. (11) Out of six who died four were found to have suffered from pulmonary tuberculosis, and two had in addition fatty degeneration of the heart.

THE TRANSMISSIBILITY OF TABES.

There are scant data concerned with the fecundity of tabetics, according to Dr. Haber (*Orvosko Lapja* 1913, August 21st). It appears that their procreative power is diminished, the proportion of childless households among tabetics being very large. Since the same is true of syphilitics it is possible that such sterility may be the result of syphilis rather than of tabes. The same observation may apply to the great mortality of the children of tabetics. Most of the cases published of hereditary tabes are usually of Friedreich's ataxia. There are undoubtedly cases of hereditary tabes, but their number is so small as to be negligible. The small proportion of cases of juvenile tabes, the issue of tabetic parents, when compared to the larger number of cases the issue of syphilitic parents, suggests that hereditary syphilis is the direct cause of juvenile tabes. A large proportion of the offspring of individuals affected with locomotor ataxia are affected with nervous disorders. Tabes cannot be blamed as being the cause of these, for heredo-syphilis creates the same predispositions and nervous accidents. Moreover, in tabetic households children born before the parent, or parents, have contracted syphilis and tabes have the same tendency to nervous diseases.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

THE particular question which has most recently been agitating the medical mind is that of post-graduate medical teaching. For a good many years the staff of the Royal Infirmary have provided in parts of the off-seasons of undergraduate teaching a series of short post-graduate courses of lectures. More recently the Western Infirmary staff have advertised and have held such a series. The present arrangements do not seem to suit the convenience of the bulk of medical practitioners desirous of benefiting by the teaching, and an agitation has commenced with a view to bringing all post-graduate teaching under one control, and arranging it so that, as far as possible, every practitioner may, if he choses, take advantage of the teaching to its fullest extent. It has been suggested that the University should be the central and controlling authority; but another opinion is that the University has neglected the matter in the past and should not be asked to intervene. There seems to be an opening for the staffs of the various hospitals to unite in appointing a joint board to make suitable and harmonius arrangements.

The dispute as to the adoption or non-adoption by the Scottish Universities of an inclusive fee in medicine has been in abeyance during the holiday season, but will no doubt break out again with renewed vigour upon the opening of the winter session, unless those who have been pressing the movement forward should desist from their endeavours. A joint meeting of the staffs of the Glasgow extra-mural schools and a meeting of the Royal Faculty of Physicians and Surgeons of Glasgow have unanimously condemned the proposal for an inclusive fee. Two of the extra-mural schools are hampered in their action by being dominated, in their governing bodies, by laymen: a disadvantage which is not shared by the third, as it is constituted on the lines of the School of Medicine of the Royal Colleges of Edinburgh. But for this disadvantage, the two schools referred to, as well as the third, would no doubt have long ere this pronounced an emphatic opinion against the proposed inclusive fee as inimical to the extra-mural schools, as Edinburgh School of Medicine has done.

On October 31st, 1910, Mr. William Robertson made a gift to Victoria Infirmary of £5.000, for the purpose of providing it with a clinical research laboratory, and this laboratory, being now ready, will be opened by Lord Rowallan, the Chairman of the Governors, on October 2nd This important addition to its equipment will put the Infirmary, in this respect, on a par with the best hospitals, with which it will now be in line.

The late Dr. James Provan, who was L.R.C.S.Edin. and M.D. of Glasgow University, was a well-known practitioner in what is now the Govan district of Glasgow. He died at his residence in Ibrox on the 23rd inst. Dr. Provan was a Surgeon-Colonel in the volunteer section of the Royal Garrison Artillery when he retired from that force about ten years ago. He was well known as a collector of pictures and curios. His licence and his degree were both taken as far back as 1864.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents]

MEDICAL MEN AS DENTISTS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your correspondent, Dr. Keogh, is quite right; there is no legal bar to the practice of dentistry, and the assumption of the title "dental surgeon" or "surgeon dentist" by any qualified medical man. Although there seemed little need for it, a clause making this point clear was inserted in the Dentists Act. There could be no reason why a surgeon should not practise dentistry when allowed to practise aural or ophthalmic surgery, for example. But there is a very cogent reason why a medical practitioner cannot act as a dentist. Dentistry is a mechanical handicraft calling for a high degree of technical skill only to be gained by those who have more or less of the gift of fingers, and who have undergone the necessary training. A six months' course of instruction in dentistry may make a man a fairly good "extractor" in simple cases, and may enable him to put in a simple dressing in an aching carious cavity. But if he wants to practise as a dentist with comfort to himself, and with a chance of success, he will need at least the amount of training demanded from candidates for the L.D.S. He will need at least two years' training at the mechanical work-bench; he will need at least two years' training in a dental hospital. These years can be, of course, concurrent. A candidate for dentistry is well advised when he gives himself a few months of probation at the work-bench. If at the end of that time he feels that he has the taste and talent for the craft he can go on, otherwise he can retire in time. It does not matter how learned and scientific as a surgeon he may be, a man cannot honestly set up as a dentist without real qualifications for the speciality. Besides the operations of conservative dentistry, there are a vast variety of prosthetic operations called for, such as "crowning" and "bar and bridge work," not to speak of the construction and fitting of artificial teeth. Unless a practitioner is prepared to do all these kinds of work he cannot succeed or even practise as a dentist. Dentistry provides a capital field for quackery, and for the operations of unscrupulous mechanics of a certain class. The Dentists Act is powerless to prevent these men from practising and assuming titles. Through their ignorance they are inflicting an incalculable amount of injury and suffering upon the simple public. This was all once more explained in a recent issue of the *Nineteenth Century* by Professor Arthur Underwood. The dearth of qualified men is, to a large extent, explained by the existence of the dental quack. We may expect legislation to deal with this some time within the next thousand years.

I am, Sir, yours truly,
September 26th. Hospital Dentist.

FRENCH DRAINS AND MALODOROUS FRANCE.

To the Editor of The Medical Press and Circular.

Sir,—The correspondence which your editorial paragraphs of August 3rd, under the above heading, has brought out, has been interesting and important, but some of the writers have missed the main point. The question of the sanitation of French hotels frequented by tourists is of very minor importance. What concerns those who, like myself, are bound to France by feelings of affection, and who have, besides, vital interests involved in questions of her prosperity; what concerns all Frenchmen imbued with true patriotism is the fact that in consequence of the incredibly backward state of public hygiene, the French death-rate is far higher than that of Great Britain, or Germany or any of her northern neighbours. All the facts were, as before pointed out, laid bare at the Paris Hygienic Congress in May last, and were emphasised in speeches by leading men, including two ex-Premiers, Ribot, and Bourgeois. Paris, "the city of light, which illuminates the whole world with its intellectual and scientific beams," is one of the most unhealthy capitals in Western Europe. It displays a mortality in tuberculosis and typhoid fever two and three times comparatively as great as that of Berlin and London respectively. And it must not be forgotten that the population of France, owing to the low birth-rate, would be diminishing were it not for the gradual nationalisation of the 1,500,000 foreigners domiciled on her soil. In view of the menace from German numbers alone, France has been obliged to impose a three years' military service on the whole of her manhood. This almost intolerable burden leaves her still with a more than dangerous numerical inferiority, and this disparity will increase from year to year.

The German birth-rate begins to fall, but her death-rate is comparatively low and falling. From 50 to 100 years will be needed to bring her to a position similar to that of France. These are the facts that pre-occupy French statesmen. The insanitary state of France, as I and my friend, "M. B. J.," have tried to show, is inflicting directly and indirectly enormous injury upon French trade and commerce. One of the best ways to overcome apathy is to address the argument to the pocket. The French are keen business people, and I have suggested that if the various British Chambers of Commerce in Paris and elsewhere could be induced to take up this question, and bring it to the front, they might compel the Press, which now ignores it, to give it the attention it deserves, and might start a movement towards the radical and great reforms which every lover of France who is aware of the present conditions must ardently long for. Thanking you for the courtesy you have shown in giving me so generously of your valuable space.

I am, Sir, yours truly,
Anglo-Francais.
Hotel Metropole, Northumberland Avenue,
September 25th, 1913.

MR. SHERREN'S LECTURE ON "THE DIAGNOSIS OF CHRONIC ULCERS OF THE STOMACH."

To the Editor of The Medical Press and Circular.

Sir,—Mr. Sherren needs no praise from me, and it is not at all astonishing to note the super-excellence of lectures emanating from that now famous school of surgery and wide field for clinical observation, the London Hospital. My great appetite for medical literature of every superior sort would probably have led me to read Mr. Sherren's lecture, even if my eye had not been caught by the following from among the opening paragraphs:—

"In no department of surgery is diagnosis so difficult and treatment in the appropriate cases so satisfactory as that of digestive disorders, considered by the populace, and often by the profession, as 'indigestion.'

"I would impress upon you that indigestion, while a useful term to denote symptoms associated with the ingestion of food, is often a dangerous cloak to hide ignorance. We should never be content until we have arrived at a conclusion as to its cause, remembering that in many instances it is but a danger signal of disease in other organs. Large numbers of patients with cholelithiasis and chronic disease of the appendix are treated medically, labelled dyspepsia, often with disastrous results."

On these paragraphs I should like to make an observation, far as it lies from the actual practical issues discussed by Mr. Sherren.

In my pamphlet on "Quackery and Medical Law Reform," the following passages appear:—

"The mischief arising from quack nostrums of all sorts is well exemplified by the class of indigestion cures. Indigestion—pain or discomfort at some part of the alimentary canal—is merely a symptom, not a distinct disease. It very often indicates merely a functional disturbance due to temporary or continued errors of dietary; on the other hand, it may be a sign of organic or malignant disease.

Cases of the more serious kind are always to be found in hospitals, and inquiry usually discloses the fact that many of them have been dosing themselves with quack medicine until, their malady having assumed a serious or mortal phase, they have been compelled to seek relief in the wards. In late years I have given up systematically inquiring for such cases, but lately I casually came across a series whilst acting as visiting member of the committee of our local hospital. These were women suffering from ulcer of the stomach, a disease which begins usually with 'indigestion.' They had all been taking for prolonged periods one or other of the most largely advertised indigestion 'cures.' One of these is a pill composed solely of aloes and soap; another is a potion the constituents of which are treacle and water, with a little aloes and capsicum. The actual value of the contents of a shilling packet would be perhaps one farthing. One of the hospital cases to which I have referred ended fatally; the life might have been saved by early diagnosis and treatment."

The observation I wish to record is this: If hospital surgeons like Mr. Sherren would be kind enough to look out for and note authentically even a few of the cases which pass through their hands, such as I have described, they might accumulate a mass of evidence of immense value in promoting legislation against the quack medicine trade. The trade in fraudulent nostrums engages a vast amount of capital, it suborns great numbers of newspapers, and through this and other means has probably succeeded in throwing into the eyes of at least some members of the Parliamentary Select Committee enough dust to confuse and obscure their judgment. It seems more than probable that when that Committee shall have published its report it may be necessary to revive the agitation that led to its appointment. In every department of every hospital evidence of the kind needed is to be discovered; it would be good if their staffs could be induced to give to the subject the attention I plead for.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common.
September 26th, 1913.

DRUGGED OR DRUNK—A POLICE DIAGNOSIS.

To the Editor of The Medical Press and Circular.

Sir,—Some days ago a policeman accosted a patient of mine in the street, and accused him of being drunk. Certainly the man was staggering and dizzy. He was delirious, lively, and irritative. He could scarcely see, his voice was strangely husky. His face was flushed and he was terribly thirsty. His pulse was quick.

As the late Judge Morris would say, the guilt of the accused was as plain as the nose on your face, and nobody but a fool or a juryman would doubt it.

But was the man really drunk? Not at all. He was a perfect crank of a teetotaller, but he had hæmorrhoids, for which I had prescribed suppositories containing zinc, bismuth, and 1½ grains of belladonna extract. He had used one of these the previous night.

The moral is——

I am, sir, yours truly,
J. C. McWalter.

Dublin,
September 18th, 1913.

OBITUARY.

DR. JAMES WILLIAMS, OF HOLYWELL.

We regret to record the death of Dr. James Williams, aged 88, which took place at Holywell on the 19th ult. The deceased, who qualified as M.R.C.S. in 1848, was probably the oldest medical practitioner in North Wales, was a native of the town, and the son of the late Mr. Peter Williams, surgeon. Dr. Williams was for 58 years one of the vaccination officers of the Holywell Union, and for 37 years Medical Officer of the Holywell Rural District Council, both of which appointments he resigned four years ago owing to advancing years.

Dr. Williams had played a prominent part in the public life of the district. He was Chairman of the old Local Board in 1872 and again in 1879, and he was the first Chairman, in 1895, of the newly formed Urban Council, continuing in the office during the following three years. He was an indefatigable worker for the welfare of his native town and a familiar figure among all classes during his long and active career. He leaves two sons and two daughters to mourn his loss. He was a Churchman and a Conservative.

SPECIAL REPORTS.

CROYDON MENTAL HOSPITAL. (*a*)

The report of the Croydon Mental Hospital gives one a fair idea of how a modern asylum is run. The accommodation is comparatively small—650 was the maximum in 1911, but we are glad to see that research into the ætiology of the various mental disorders is being made the subject of investigation. Heredity is found to be an important factor. An insane history was found in 55.4 per cent. of cases admitted during the year and a direct parental inheritance in 34 per cent. Of those lunatics who had an insane history only 28 per cent. recovered, against 46.2 per cent. of those whose history was clean. The Medical Superintendent realises what should be, but apparently is not, obvious, that lunacy is a branch of medicine, and recommends that a mental clinic be established at every country hospital to be presided over by the medical officers of the local asylum. His object is to get into early touch with mental cases, whose friends at present have an unreasoning horror of the name asylum. We hope that such clinics will be established. They exist already at Munich and Berne, and tentative efforts are being made at some of the large London hospitals on the lines indicated. Music and dancing are held in good therapeutic repute at Croydon, a practice supported by the testimony of Pythagoras, who used them in cases of "anger, malice, and all such disorders of the mind" "against the dejections and corrodings of the same."

MEDICINE IN THE CANAL ZONE. (*b*)

These volumes are chiefly notable as evidence of the wonderfully complete manner in which the United States Government has attacked the problem of making the Panama Canal Zone into a habitable region. As side branches of the sanitary scheme without which the engineers' work would have been handicapped past tolerance, if not brought to nothing, we have a medical association established right in the heart of the workings, an association which reports fully all interesting or unusual cases, and whose proceedings are even published by an official press situated in the Canal Zone. The text of the books is varied and valuable: too varied to comment on here. But they are remarkable as evidence of the success that follows a policy often wrongly described as genius—an infinite capacity for taking pains.

MEDICAL EQUIPMENT OF CAPT. SCOTT'S EXPEDITION.

The official report by the Surgeons to the British Antarctic Expedition, 1910, upon the medical equipment, has been received and reads as follows:—

British Antarctic Expedition, 1910, July 18th, 1913.

"The complete satisfaction derived from the medical equipment supplied to the National Antarctic Expedition, 1902-1904, guided us in selecting Messrs. Burroughs Wellcome and Co. for the sole supply of medical equipment. This equipment consisted entirely

---

(*a*) "Annual Report of the Visiting Committee on the Croydon Mental Hospital for the Year ending March 31st, 1912."

(*b*) "Proceedings of the Canal Zone Medical Association." Vol. IV., Part I., April to September, 1911; Vol. IV., Part II., October, 1911, to March, 1912.

of 'Tabloid' medicine chests and cases, and 'Tabloid' medicines, and we have to report that the good opinion previously formed was maintained. The equipment was absolutely complete and perfect in every detail, and the 'Tabloid' products retained their full activity under trying and varying conditions of climate and transport. The actual 'Tabloid' equipment designed by the late Dr. E. A. Wilson for the Southern journey, and carried to the Pole, is being returned to you, with its remaining contents, which are in perfect condition."

An interesting photograph of the case actually carried to the Pole is reproduced in the accompanying illustration.

REVIEWS OF BOOKS.

RECENT WORKS ON PATHOLOGY.

It is not long since the number of text-books on pathology written in English could be told on the fingers of one hand. Now they are as plentiful as blackberries, and, let us add, most of them as excellent as that succulent fruit. Their very number, however, compels us to limit the space we can devote to each, and we therefore have to notice in this review not only some recent text-books, but also some other works dealing specially with pathology.

The first on our list (*a*) is a book which, in its older form, was for a quarter of a century a favourite text-book. Professor Woodhead's "Practical Pathology" had been, however, for many years out of print, and during that time pathology had become almost a new subject. On its practical or technical side but little of the old skeleton remained. In preparing a fourth edition, Professor Woodhead had almost to write a new book. He wisely decided, however, to follow the same lines as in the original work. The book is strictly and logically a practical work. It gives clear and definite directions on the various points of *technique*, so that it is admirably suited as a class-book for laboratory use. It is not, however, concerned exclusively with *technique*, but it gives, in addition, terse descriptions of the various naked-eye and minute appearances met with in the study of morbid anatomy and histology. When we add that the pictures are not only the best in execution, but most illustrative of their subject, our readers may be satisfied that the present generation of students and practitioners is, like the last, deeply in Professor Woodhead's debt.

Drs. Adamii and McCrae's "Text-Book of Pathology" (*b*) is avowedly and, indeed, necessarily, based on Professor Adami's recent work on the "Principles of Pathology." Its scope and intention are, however, quite different, and it should secure a class of readers among those who would be scared from the larger work by the mere fact of its exhaustiveness. In the treatment of general pathology the present work follows closely, though with much less detail, on the lines of the "Principles," but in regard to special pathology the authors have given themselves a freer hand. The result as a whole is satisfying. If one were not acquainted with the larger work, one would never detect from the reading of this that it was in any sense an abridgment. The writers properly devote half their space to questions of general pathology. For knowledge of this a student must rely on his text-books, since even the most thorough lecturer can hardly do more than furnish the framework with which the knowledge is to be fitted. Special pathology, on the other hand, is learned in the main from the study of gross and microscopic specimens, the text-book being only ancillary. As is to be expected in a book in whose making Prof. Adami has a hand, the subject of Inflammation receives adequate treatment. The twenty-five pages devoted to Immunity give as satisfactory a summary of present knowledge as can be expected. An unusual, but very valuable feature in a book of the sort is a section on Pain, which is somewhat fancifully defined as "the cry of the tissues." The greater part of the section is devoted to an explication of the fact that pain as felt is always referred, whether the reference be accurate or not. The sections dealing with special pathology are on the whole careful and methodic, though in a few instances—*e.g.*, in the discussion of tumours of the uterus—they may tend to be "sketchy." The drawings are pleasing, and, unlike some so-called "illustrations," they really illustrate the subject dealt with. The book should take a leading place as a student's text-book.

"The Text-Book of General Pathology" (*a*) is, so far as we know, the first book on pathology written on this plan in English. Joint authorship has certain disadvantages, chiefly in what we may call the architecture of a book, but it has great advantages, in that each contributor can be given a subject on which he is able to speak with authority and first-hand knowledge. The editors have been judicious and fortunate in getting their team together. In addition to the editors themselves, the following have contributed articles:—Drs. A. P. Beddard, A. E. Boycott, C. H. Browning, A. E. Garrod, J. S. Haldane, I. Walker Hall, A. F. Hertz, F. W. Mott, J. H. Ryffel, S. V. Sewell, J. Lorrain Smith, and E. Ainley Walker. The general intention of the editors has been to show the close dependence of pathology on physiology, "that the laws of disease are really the laws of health, and lack of co-ordination between the normal activities of the component tissues of the body is often the most important factor in the origin of disease." It is in the hope of elucidating this principle that the editors have called to their aid not only professed pathologists, but physiologists and practising physicians. The result is a book which presents to the reader the principles of pathology in the most complete form that is justified by the latest researches. It is naturally not arm-chair reading, nor is it intended for the beginner, but to any medical man who takes an intelligent interest in what used to be called "the institutes of medicine," the scientific groundwork on which practice is based, we can recommend no better book.

The intention of Dr. Julius Bernstein's book on "Applied Pathology" (*b*) is to give to practitioners and senior students a survey of the applications of clinical research. It is based on the lectures on clinical pathology delivered by the author at the West London Post-Graduate College. Dr. Bernstein sees much to regret in the present position of the clinical pathologist, who is usually a pathologist with little knowledge of clinical medicine. He looks to the future to see the physician develop into a physician-pathologist, who will be equally at home at the bedside and in the laboratory. We agree in hoping for the advent of such a character. The difficulty is, however, to know whether he will be a pathologist turned physician, or a physician turned pathologist. Dr. Bernstein's book, if read, will undoubtedly give the practitioner a good view of what he may gain by the assistance of the clinical pathologist, but the difficulty will be to persuade him to read it. The author too often forgets that he is not writing a laboratory hand-book, and he degenerates into details of *technique*. Moreover, the publishers have hardly helped him much. The volume is unpleasant in appearance and unduly heavy. Dr. Bernstein's discussions, nevertheless, are clear and his opinions sound. His choice of words may give rise to criticism. We know no justification for such a monstrosity as

---

(*a*) "Practical Pathology," a Manual for Students and Practitioners. By G. Sims Woodhead, M.A.Cantab., M.D.Edin., Hon. LL.D.Toronto. With 275 coloured illustrations. 4th edition. Pp. xxii. and 798. London: Henry Frowde; Hodder and Stoughton. Price 31s. 6d. net.

(*b*) "A Text-book of Pathology for Students of Medicine." By J. George Adami, M.A., M.D., F.R.S., and John McCrae, M.D., M.R.C.P.Lond. Illustrated with 304 engravings and 11 coloured plates. Pp. x. and 759. London: Macmillan and Co., Ltd. Price 25s. net.

(*a*) "Text-book of General Pathology." By Fourteen Contributors. Edited by M. S. Pembrey and J. Ritchie. Pp. xii. and 773. London: Edward Arnold. 1913. Price 18s. net.

(*b*) "Applied Pathology." By Julius M. Bernstein, M.B.Lond., D.P.H.Camb., M.R.C.P. Illustrated. London: University of London Press; Hodder and Stoughton; and Henry Frowde.

"serology," which is the heading of one of his chapters; nor do we think that a consulting physician should be described as an "addendum" to the general practitioner. In his discussion of vaccine therapy, the author unduly depreciates the use of vaccines in septicæmia; he is evidently not acquainted with recent work on the use of vaccines in puerperal sepsis. Nevertheless, in the main Dr. Bernstein's work is sound and interesting, and we hope he may have many readers.

PROFESSOR GRUNBAUM'S book on *Morbid Histology* (*a*) avowedly follows the lines of Sir Edward Schäfer's *Essentials of Histology*, and a better model could not have been chosen. The book is intended to assist in the teaching of general rather than of special pathological anatomy. The descriptions are clear, terse, and dogmatic. The selection of subjects could hardly be bettered, though, of course, every teacher proceeds on his own lines. The subjects of the illustrations, which, in a student's book for use with the microscope, are of primary importance, have been carefully chosen from typical sections, and the illustrations have been well executed. A few pages are given to methods.

IT is quite true, as Dr. Shennan says, in the preface to his book (*b*), that it is unusual for a student of medicine to carry with him into practice a knowledge of *post mortem technique* sufficient to enable him to conduct a *post mortem* examination creditably. This is a matter which teachers of pathology should remedy, and, if they set themselves to it, they will get much help from Dr. Shennan's book. After a general chapter on the *post mortem* examination, one on the external examination of the body, and one on the internal examination, Dr. Shennan takes in turn the several regions of the body, describing in detail the morbid anatomy of the various conditions likely to be encountered. His treatment is adequate, and the practitioner who knows Dr. Shennan's book will be competent to carry out an autopsy in an intelligent and satisfactory manner. The book is large, however, and is more likely to be used as a work of reference than for ordinary reading. As a work of reference it should be in the *post mortem* room of every hospital, or within easy reach of the resident, on whom the duty often falls of making a *post mortem* examination. The illustrations, most of which are photographs of actual specimens, add to the value of the book. Many of them fulfil all the functions of illustrations, and demonstrate the required points as well as could be done by drawings. The photographs of amyloid liver (Fig. 113) and nutmeg liver (Fig. 115), for example, are excellent. On the other hand, some give no enlightenment. Fig. 122 of cirrhosis of the liver is from a specimen spoiled by drying, and gives a fictitious appearance of excessive and remarkable pigmentation! The general success of the photographs is, however, remarkable. Dr. Shennan in a brief appendix gives useful directions for the preservation of tissues. We cannot leave this excellent book without declaring that there is no excuse for its title; the term "*post mortem*" is not a substantive.

GYNÆCOLOGICAL DIAGNOSIS AND PATHOLOGY. (*c*)

CONSIDERING the importance of the subject, there are singularly few books in English dealing with gynæcological pathology. The references in text-books of pathology are usually meagre, and the paragraphs dealing with pathology in text-books of gynæcology prehistoric in their stage of knowledge. We extend, therefore, a cordial welcome to Drs. Barbour and Watson's "Gynæcological Diagnosis and Pathology." As there is already adequate attention paid in other books to questions of diagnosis other than those based on pathological findings, our chief interest is in the sections dealing with pathology. The book is arranged in anatomical sequence, conditions of the uterus, the tubes, the ovaries, the parametrium, the vagina, and the vulva being dealt with in turn. The treatment of endometritis is sensible. Having given a brief notice of acute endometritis, the authors next describe glandular hyperplasia, the so-called "chronic endometritis." While we agree that this change is certainly not purely inflammatory, we cannot agree that it is of the nature of a new growth, or that "it is really a simple adenoma." Nor do we agree that the change known as interstitial endometritis is merely a part of the much rarer condition of fibrosis of the uterus. We find no mention of cystic endometritis, a condition associated with a fairly definite group of symptoms. It is stated (p. 83) that "the diagnosis of chorion-epithelioma is made by the recognition of the two types of chorionic cells—Langhan's cells and the syncytium," forgetful of the fact that syncytial cells may be altogether absent. In describing degenerative changes in fibroids, the statement is made that necrobiosis or red degeneration "is probably the commonest degenerative change met with in fibroid tumours." Necrobiosis is certainly very common, but not five per cent. of necrobiotic changes can be described as red degeneration. We miss any mention of dropsical or of fatty changes, both of which are common. There is an excellent chapter on tubal pregnancy, but we find no mention of other forms of ectopic pregnancy. A requisite warning is given as to the potential malignancy of papillomatous cysts of the ovary. In the description of conditions of the vagina we miss any mention of cysts, and in relation to the vulva of any malignant tumour other than epithelioma, though adeno-carcinoma of the vulva presents certain interesting features. The work is copiously illustrated; the illustrations appear to be from photographs, and many of them are lacking in definition. In the illustrations of microscopic preparations the magnification is not stated. Our criticisms have all been directed to matters of detail, for in the main the book maintains a high level of excellence. It should be read with care by every practising gynæcologist. We congratulate the authors on producing so useful and desired a work.

MALFORMATIONS AND DISEASES OF THE FŒTUS (*a*)

OUTSIDE Dr. Ballantyne's writings, very little exists in English dealing systematically with prenatal pathology, and we therefore welcome Dr. Blacker's translation of Professor Birnbaum's book on "Malformations and Congenital Diseases of the Fœtus." The author treats in order of the various regions of the body, and the translator has aided us in understanding the anomalies dealt with by reference to the facts of normal embryology. The book has a special interest to obstetricians in that due attention is given to questions of diagnosis and treatment. Notice is taken also of injuries to the child occurring at or near birth. There is an interesting, if brief, chapter on the legal rights of monsters, a subject on which it is hard to glean information from the medico-legal text-books. It appears that in England, according to Blackstone, if a monster "hath human shape" it can inherit, but if it "hath not the shape of mankind, but in any part bears the resemblance of the brute creation," it has no legal status. In Germany, on the other hand, anything born of a woman has legal rights. The question may be of some importance in the cases of tenancies for life depending on the birth of a live heir. Again, questions as to the determination of sex are of frequent occurrence; some three persons a year on an average apply to Somerset House to have the record

---

(*a*) "The Essentials of Morbid Histology for the Use of Students." By Albert S. Grünbaum, M.A., M.D., F.R.C.P. With 22 coloured plates and 139 other illustrations. Pp. xvi. and 219. London: Longmans, Green and Co. Price 7s. 6d. net.

(*b*) "Post-Mortems and Morbid Anatomy." By Theodore Shennan, M.D., F.R.C.S.Edin., Pathologist to the Royal Infirmary, Edinburgh, etc. Pp. xvi. and 496. London: Constable and Co. Price 18s. net.

(*c*) "Gynæcological Diagnosis and Pathology." By A. H. F. Barbour, M.D., LL.D., F.R.C.P.Edin., and B. P. Watson, M.D., F.R.C.S.Edin. With 8 plates and 202 figures. Pp. xvi. and 220. Edinburgh: William Green and Sons. Price 7s. 6d. net.

(*a*) "A Clinical Manual of the Malformations and Congenital Diseases of the Fœtus." By Prof. Dr. R. Birnbaum. Translated and annotated by G. Blacker, M.D., B.S., F.R.C.P., F.R.C.S., with 38 illustrations in the text and 8 plates. Pp. xiv. and 379. London: J. and A. Churchill. Price 15s. net.

of their sex altered. In discussing the case of the Siamese twins, the curious remark is made: "As the two twins have an active interchange of the fluids of their bodies, the vaccination of one would no doubt suffice. We may suppose, however, that baptism would have to be administered to both."

HOW TO DIAGNOSE SMALL-POX. (a)

The difficulty of diagnosis in the case of small-pox, especially when modified by vaccination, is well-known, and it is to be constantly borne in mind that we are not dealing with a suspected case of small-pox in its natural form, and that many of its characteristic features are not to be found. The volume under review, by Dr. Wanklyn, an Officer of the Metropolitan Asylums Board, and who has had an exceptional experience of this disease, is of real interest. In the opening chapters accounts are given of outbreaks due to errors in diagnosis from an unsuspected case, more especially with regard to measles and chicken-pox, and the result being that measures for the prevention of its spread have not been undertaken. In the chapter relating to practical points in the method of examination stress is laid on the following important points, namely, that small-pox should always be borne in mind, and that the whole surface of the body should be seen as far as possible at the same time, and in a good light, also emphasising the point that a hot bath may bring out a rash, previously undiscoverable.

In the chapter discussing cases with a view to diagnosis, the points which are to be relied upon are clearly and definitely defined.

The aim of the book is to assist the reader to recognise that disease whatever its appearance. It most certainly accomplishes its object, being a piece of honest, solid work, skilfully arranged and well elaborated, and should be on the bookshelf of every public health authority.

MEDICAL NEWS IN BRIEF.

Medical Sickness and Accident Society.

The usual monthly meeting of the Executive Committee of the Medical Sickness, Annuity and Life Assurance Society was held at 429 Strand, London, W.C., on Friday, September 19th, Dr. F. J. Allan in the chair. Contrary to expectation, the summer months have shown very little falling off in the claims, and the experience has been heavy and slightly over the expectations. New business was well up to the average, and the steady growth of proposals for additional benefits received indicates the satisfaction of members with the Society.

The half-yearly balance sheet considered at this meeting showed that the reserves are now just on £260,000, and each fund shows an increase. The actual amount spent on management for the half-year was 5 per cent., and the economy practised in this department has been one of the great factors of the Society's success.

A letter was read from the widow of a member, expressing her thanks for the grant made, through the Society's recommendation, by the Royal Medical Benevolent Fund, and asking for support for her son's election to Epsom College next June. The Society subscribes largely to these two institutions, and has been instrumental in obtaining many foundation Scholarships for the sons of deceased members, and grants of money for their widows.

Mosquitoes in Epping Forest.

Mr. W. E. Rowe, Chingford Urban District Council, presided over a conference held last week at the offices of the Essex County Council, Broad Street Place, to consider the best means of exterminating mosquitoes in the neighbourhood of Epping Forest. Representatives were present from Buckhurst Hill, Chingford, Leyton, Longton, Wanstead, Woodford, Epping, and the Epping forest Committee.

Dr. Stanbury Brook (Medical Officer of Health for Chingford) read a report prepared by Dr. Edward Halford Ross, of the John Howard McFadden Research Fund at the Lister Institute of Preventive Medicine, on the results of investigations carried out in the district. After describing the life-history of the mosquito, Dr. Ross said that while it did not spread fevers in this country, it set up inflammation, and sometimes blood poisoning, abscess formations, etc. He absolved Epping Forest itself to a great extent, and stated that he found that the mosquitoes were bred principally in water-butts, tubs, fountains, and in small quantities of water collected in private gardens.

Dr. Brook argued that on this report the remedy lay in the direction of abolishing those receptacles, or, at any rate, the emptying of them once a week; the filling up of unnecessary pools and wells; the clearing of obstructions from small rivers, etc.; the spraying of large ponds with oil, or the introduction of mosquito egg-eating fish, which could be obtained from Kew Gardens. Bats and swifts, which fed upon the mosquitoes, might also be employed. Above all, he urged that they should appeal to the private householders in the neighbourhood of Epping Forest.

After some discussion it was resolved to take measures for exterminating the pest, and a committee was appointed to consider the matter further.

New Hospital at Dollis Hill.

A new hospital, known as St. Andrew's Hospital, Dollis Hill, was opened last week by the Lord Mayor of London. The Institution overlooks a large expanse of open country on the east and north, while to the south stretches Gladstone Park. It is the gift of a French Roman Catholic lady, who wishes to remain anonymous until after her death, and has been built under the patronage of Cardinal Bourne. The principal object is to provide for people who are unable to pay the fees charged at the more expensive hospitals and nursing homes. At St. Andrew's a charge of 2½ guineas a week will be made, this being entirely inclusive. The new building has accommodation for 100 patients, but at present only 50 beds are occupied. Donations are needed to extinguish a debt of £10,000. The care of the institution has been entrusted to the Congregation known as "The Poor Servants of the Mother of God."

Treatment of Tuberculosis in the Isle of Wight.

The Local Government Board having sent several communications to the Isle of Wight County Council with reference to the provision of a scheme for the treatment of tuberculosis, the General Purposes Committee of the Council have decided to reply that it is not considered necessary to take any steps at present, either for the provision of dispensaries or the establishment of a sanatorium, and that in the opinion of the medical representatives there is at present no necessity for the appointment of a tuberculosis officer.

St. Bartholomew's Hospital and College.

The following awards to entrance scholarships have been made:—

Entrance Scholarship in Arts.—£100 for one year to James Dick, of Epsom College, and Leonard Duncan Porteous, of Huddersfield College (equal).

Jeaffreson Exhibition.—£50 for one year to Rowland John Perkins, of Bedford Modern School.

St. Mary's Hospital Medical School.

The following awards have been made as the result of the competitive examination:—

University Scholarships of 50 guineas each.—S. C. Dyke, B.A., Exeter College, Oxford; W. H. Thomas, University College, Cardiff.

Open Scholarships in Natural Science.—£75, A. J. Cokkinio, International College, Smyrna; £75, G. V. Davies, Epsom College.

Palmer Scholarship of £25 guineas.—G. MacAlevey, Mount St. Mary's College, Chesterfield.

Epsom College Scholarship (by nomination).—B. Thomas.

(a) "How to Diagnose Small-Pox." By Dr. W. McC. Wanklyn. London: Smith, Elder and Co.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Mr. R. Cox (London, S.W.).—The first *London Pharmacopœia* was published by the Royal College of Physicians in 1618, and numerous other editions appeared between that date and 1836. The first *Edinburgh Pharmacopœia* was published in 1699, and the first *Dublin Pharmacopœia* in 1794. The first *British Pharmacopœia* was published in 1864, under the direction of the General Medical Council.

BRITISH HOSPITAL FOR MENTAL DISORDERS AND NERVOUS DISEASES.—"FORBES WINSLOW MEMORIAL."

We are informed that, owing to the death of Dr. Forbes Winslow, the above hospital is under the management of a new lay executive committee and is being entirely re-organised. An increased medical staff has been appointed, and as soon as the lease of the present building at 72, Camden Road, N.W., expires, new premises will be found. There have been on an average three thousand borderland cases treated annually, and it is hoped that under the new auspices the usefulness of this institution will be considerably increased. The hospital is free to the indigent poor, and is supported by voluntary contributions.

Erratum.—In the letter by Mr. A. A. Bradburne (Manchester), printed in our issue of the 24th ult., L.R.C.S. should have been F.R.C.S. We regret the error, which was made inadvertently.

Dr. T. S. (Somerset).—There is no reason why salvarsan should always be given by the same route. Quite recently, Wechselmann has reported a series of one thousand cases in which neosalvarsan has been injected into the area around the great trochanter directly over the fascia, care being taken not to inject it into the fascia, fat, or muscle. It is said that by this method there are no complications, such as necrosis. Full details are given in the *Muench. Med. Woch.* No. 24, 1913.

Meetings of the Societies Lectures, &c.

Thursday, October 2nd.

North-East London Clinical Society (Prince of Wales's Hospital, Tottenham, N.).—4.15 p.m.: Opening address by Dr. J. G. Risien Russell.

Friday, October 3rd.

West London Medico-Chirurgical Society (West London Hospital, Hammersmith, W.).—8 p.m.: Presidential address by Dr. F. S. Palmer.

Appointments.

Butler, T. Harrison, M.D., B.Ch.Oxon., Assistant Surgeon to the Birmingham and Midland Eye Hospital.

Dickson, William Arnett, M.D.St. And., F.R.C.S.Edin., D.P.H., County Tuberculosis Medical Officer to the Joint Committee of the Gloucestershire County Council and Gloucester City Council.

Heaton, G., M.B., Ch.B.Oxon., F.R.C.S.Eng., Consulting General Surgeon to the Birmingham and Midland Eye Hospital.

Hird, R. Beatson, M.D., B.Ch.Birm., F.R.C.S.Edin., Assistant Surgeon to the Birmingham and Midland Eye Hospital.

Johnston, M. J., M.B., Ch.B.Edin., Tuberculosis Officer for West Sussex.

Jones, J. P., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Barmouth District of the county of Merioneth.

Kelynack, T. N., editor of "The British Journal of Tuberculosis" and of "The Child," Hon. Physician to the well-known Ragged School Union and Shaftesbury Society.

McColl, Eva, M.D.Glasg., D.P.H.Camb., School Medical Officer of Jarrow.

Peake, H. G., M.B., Ch.B.Vict., House Physician at the Salford Royal Hospital.

Pitt, Oswald, M.R.C.S., L.R.C.P.Lond., House Surgeon at the Salford Royal Hospital.

Smith, D. Priestley, M.B., B.Ch.Birm., Assistant Surgeon to the Birmingham and Midland Eye Hospital.

Todd, Alan H., M.B., B.S., B.Sc.Lond., F.R.C.S.Eng., Surgical Registrar and Tutor and Staff Anæsthetist at Guy's Hospital.

Vacancies.

Argyle and Bute Asylum, Lochgilphead.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board, and laundry. Applications to the Medical Superintendent.

Anæsthetist to the Royal Infirmary, Dublin, and Instructor in Anæsthetics in the University of St. Andrews. Salary £200 per annum. Applications to the Secretary of the Royal Infirmary, Dundee.

James Murray's Royal Asylum for Lunatics, Perth.—Physician-Superintendent. Salary £700 per annum, with furnished house and emoluments. Applications to Condie, Mackenzie and Co., W.S., Perth.

Middlesex County Asylum, Wandsworth, S.W.—Third Assistant Medical Officer. Salary £200 per annum, with full board, lodging, etc. Applications to the Medical Superintendent.

North Ormesby Hospital, Middlesbrough.—Assistant House Surgeon. Salary £100 per annum, with board, apartments, washing and attendance. Applications to E. C. Smith, F.C.I.S., Secretary.

The Hospital for Sick Children, Great Ormond Street, W.C.—Assistant Casualty Medical Officer. Salary for six months £30, washing allowance £2 10s., with board and residence in the Hospital. Applications to the Secretary (see advt.).

Eastern Dispensary, Leman Street, E.—Resident Medical Officer. Salary £120 per annum, with furnished residence and attendance. Applications to the Secretary.

Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120 per annum, with board and lodging. Applications to H. J. Bewlay, Secretary.

County Asylum, Whittingham, Preston, Lancs.—Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Births.

Chater.—On July 18th, at New Hanover, Natal to Dr. and Mrs. T. A. Chater—a son.

Derry.—On September 25th, at "Windspoint," Higher Drive, Purley, Surrey, to Dr. and Mrs. D. E. Derry—a daughter.

Dunnett.—On September 29th, at 3 Ascott Avenue, Ealing, W., Agnes Dunnett, M.B.Lond., wife of Lionel Francis Dunnett, of a son.

Griffin.—On September 22nd, at Baldock, Herts, the wife of John P. Griffin, M.R.C.S., L.R.C.P.Lond., of a daughter.

Mason.—On September 27th, at Toll House, Great Bridge, Staffordshire, to Dr. and Mrs. Philip Mason—a son.

Phillips.—On September 20th, at Bethlem Royal Hospital, London, to Dr. and Mrs. Porter Phillips—a daughter.

Thornley.—On September 27th, at Ravensdene, Scarborough, the wife of Dr. J. Hardwick Thornley, of a daughter.

Wilson.—On September 25th, at Murree, Punjab, India, to Captain and Mrs. N. Methven Wilson, I.M.S.—a daughter (Margaret Helen).

Woodyatt.—On September 22nd, at the Infirmary, Vallance Road, London, N.E., to Dr. and Mrs. Woodyatt—a son.

Marriages.

Bowring—Lewis.—On September 27th, at Shoreham, Walter Andrew Bowring, F.R.C.S., of Brighton, to Margaret, widow of Rev. E. T. Lewis, and younger daughter of Rev. H. Rowsell, late Vicar of Christ Church, Mayfair, W.

Caley—Briggs.—On September 27th, at St. John the Baptist's Church, Knighton, Leicester, F. Goodman Caley, M.B., eldest son of Hugh A. Caley, of Windsor, to Edith Martha, youngest daughter of the late Joshua Briggs, of Headingley, Leeds.

Forrest—Child.—On September 20th, at All Soul's Church, South Hampstead, Captain Frank Forrest, R.A.M.C., to Maude Adelaide, youngest daughter of John and Amelia Child, of 2 Welch Road, Hampstead.

MacPhee—Soanes.—On September 27th, at Southampton, Burgess MacPhee, M.B., Ch.B., D.P.H., eldest son of Stephen A. MacPhee, of Pollokshaws, Glasgow, to Daisy Marion, elder daughter of Mrs. Soanes, Bournemouth.

Mills—Roberts.—On September 23rd, at St. James' Episcopal Church, Inverleith Row, Edinburgh, Horace Macaulay Mills, M.B., Ch.B., Elsecar, near Barnsley, youngest son of Mr. and Mrs. John Mills, The Avenue, Clifton, Bristol, to Gladys Helen, younger daughter of Mr. and Mrs. Edward A. Roberts, 26 Dick Place, Edinburgh.

Deaths.

Ashe.—On September 21st, at Langley, Bucks, William Percy Ashe, M.D., aged 62.

Hartill.—On September 23rd, at Manor House, Willenhall, John Thomas Hartill, L.R.C.P.Lond., M.R.C.S., J.P., aged 65.

Norris.—On September 24th, at Langley Lodge, Surbiton, Florence Emily, wife of Frank B. Norris, M.D.

Roxburgh.—On September 25th, at Weston-super-Mare, Eliza Fanny, beloved wife of Robert Roxburgh, M.B., F.R.C.S.E.

Spearman.—On September 15th, at Clacton-on-Sea, Robert Spearman, M.A., M.B., B.C.Cantab., aged 36.

Williams.—On September 19th, at Castle Hill, Holywell, Flints, James Williams, M.R.C.S.Eng., L.S.A.Lond., aged 88.

Wilson.—On September 23rd, at The Corner House, Southwold, Francis Kenneth Wilson, M.B., B.S.Lond., aged 43.

Wood.—On September 23rd, at Sunny Bank, Broad Oak, Heathfield, Sussex, Alice, the beloved wife of Henry Thorold Wood, M.R.C.S., passed peacefully away in sleep, after a long illness patiently borne. Aged 58.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, OCTOBER 8, 1913. NO. 15.

NOTES AND COMMENTS.

The Wandsworth B.M.A. Resolution.

THE medical profession has yet to learn the art of collective bargaining and to acquire the fundamental principles of unionism. Better proof of that assertion could hardly be required than the actions of the Wandsworth Division of the B.M.A. in advising their fellow members who disapproved the pro-panel policy of the Association forthwith to resign. In other words, a little knot of extremists wish to wreck the Association because they do not approve the reversal of the non-panel policy which at the close of last year dominated that body. If one attempts to trace the origin of the trouble it will probably be found in the pledge that was imposed upon members at an early stage of the proceedings. The terms of the compact were concise and stringent and the impossibility of enforcing them was made evident in the stampede at the end of December, 1912. Pledge or no pledge, the majority of members flocked to the panels and a change of attitude on the part of the Association followed as a matter of course. It is part of the irony of the situation that Dr. Cox had to account for and excuse that *volte-face* to the non-panel malcontents of the Wandsworth Division. If members cannot subordinate their individual views to the judgment of the majority they become at once a source of weakness to the Association, and their only logical course is immediate resignation. Meanwhile we are glad to believe that the B.M.A. will emerge a stronger and wiser body as the result of the past few years' experience.

The Medical Register.

ELSEWHERE in our columns appears the annual appeal issued to the profession by the Registrar of the General Medical Council. He asks all men on the *Register* to see that their names and addresses are accurately recorded therein. Any practitioner who may have a doubt as to the accuracy of the details published regarding him should communicate at once with the Registrar, 298, Oxford Street, London, W. As the *Register* is the only official publication it is obvious that any error of description may cause a considerable amount of inconvenience when the medical man thus wrongly described is called upon to sign documents in a professional capacity, or to discharge any of the functions that particularly appertain to legal medical qualification. A warning is issued by the Council as to the signing of certificates that may subsequently be made use of in courts of justice or for administrative purposes. It goes without saying that great circumspection should be exercised before signing any responsible documents of the kind.

Council Reforms.

THE solicitude shown by the General Medical Council in this matter suggests a regret that their duties do not extend over a wider range of activities. The Council is the only body that enjoys the privilege of presenting its views officially to the Government, owing to its connection with the Privy Council. So far the fruits of that high official relationship have as a rule been conspicuous by their absence. There are certain reforms that if carried out could hardly fail to prove of value to the medical profession. The Council, needless to remark, is cramped by lack of funds. Why should not registration be made compulsory upon all medical men, and why should it not be maintained by the imposition of a small annual fee? The lawyers have adopted that wise and simple course; why should not the doctors follow suit? If the General Medical Council were to start a vigorous campaign in favour of this and a few other reforms they would probably be able to get them through Parliament at the cost of a few years' insistence. It is to be feared, however, that the Council will not shake off its slough of *laisser-faire* conservatism so long as its constitution remains practically that of a non-elected and non-representative, irresponsible body.

Railway Sanitation.

A MEDICAL man has sent us a letter dealing with the subject of railway sanitation. He agrees generally with the remarks that have recently been made by various correspondents and particularly as to the evident lack of supervision by local sanitary authorities. No one, by the way, has so far answered our request for information as to the legal position of railway companies with regard to local medical officers of health. The point is one that must frequently have arisen. It seems unthinkable that so practical a nation as our own in matters of health administration can have overlooked so important a detail. Our correspondent has made it his duty to look into the sanitary arrangements at certain provincial railway stations. He reports a state of affairs that in some respects is truly deplorable. Urinals without a continuous water flush are of common occurrence; some of the water-closets are dirty, their pans filthy and their atmosphere redolent with sewer gas. Another legal point raised by our correspondent is whether a railway company is not forced by Act of Parliament to provide free closet accommodation for passengers. It seems hardly fair that the company should treat the daily needs of life as a source of income. Later we hope to discuss the whole subject of railway hygiene somewhat exhaustively.

Medical Portraits and Proprietary Advertisements.

Recently some of the London daily newspapers have issued advertisements of a nature objectionable on various grounds to the medical profession. A proprietary cure for asthma contains a quotation from the works of the late Sir Morell Mackenzie, together with a cabinet-size photograph of that distinguished specialist. The advertisement deals with a "safe and permanent cure" for asthma. As no such remedy is known to medical science, and, indeed, it is inconceivable that any single drug, or combination of drugs, would achieve such a result, while, on the other hand, asthma itself is in many cases a hopeless and incurable condition, it is clear that the "cure" is not one whose advertisement claims can be substantiated in any court of medical appeal. To insert the name of one of our great medical men with such an advertisement, therefore, is to put upon his memory a slight that is intolerable. Why should not the General Medical Council bestir itself with regard to this point? Why should it not represent strongly to the Government the desirability of a short Act rendering the use in advertisements of the name of a deceased medical man a legal offence? The British Medical Association might take the matter up with advantage. If both bodies were to press the point vigorously and repeatedly in the proper quarters the desired alteration would probably be effected within a reasonable compass of time.

Dr. Dunlop's Side of the Question.

Elsewhere in our columns will be found some editorial comments on the case of the panel doctor who was compelled to pay damages and costs for non-attendance on a patient to whom he was summoned. This paragraph is added here, as it would not be fair to Dr. Dunlop if his side of the case were not fully stated. A good report of the action is given in the *Liverpool Daily Post* of October 3rd. According to counsel for defendant the first message reached him about 12.30 p.m., when the doctor had started on his rounds. On returning at 3 p.m. he noted the call. He then had dinner and attended his surgery from 3 to 4, after which he had a cup of tea. At 5 o'clock a Miss Kelly called and he said he would go to the house. At half-past five, just as he was about to start, two sisters of the plaintiff came and insisted upon his going with them at once. He was nettled by their manner, and because he did not at once comply they said he need not come at all, and they would get another doctor. The doctor took that as his dismissal and did not consider the case any more. It seems clear from the facts elicited that the doctor had an extremely busy day and that he objected to what he considered the peremptory nature of the call. One moral to be gathered from the incident is that the lot of the medical man with a large panel is not altogether a bed of roses. Trouble seems to arise pretty often from the late messages, that is to say, those that come after the doctor has started on his morning round. It would be a good plan were the Insurance Committee of every large district to appoint an extra panel doctor, so to speak, for the sole purpose of attending emergencies and of relieving panel doctors during such times of great pressure as must arise in all contract practice.

LEADING ARTICLES.

METHODS OF MEDICAL EDUCATION.

Of general education it may be permitted to express the doubt that our national methods are still open to a good deal of improvement. Technical instruction, nature study, subjects specially fitted for the individual capacity and bent, and other important departures are being assessed at a rapidly increasing value by our educational authorities. The modern schoolmaster, in spite of the inherent conservatism of his profession, is in fact translating his work more and more into terms of science and abandoning the time-worn traditions of fashion and theory. To state the matter broadly, education is undergoing that process of evolution inevitable to all human institutions. Nor is the spirit of change less evident in the field of medical education, with which our readers are more directly concerned. In his recent opening address, Sir William Osler, one of the philosophic minds of modern medicine, had a good deal to say about the future of medical education. It is not proposed to follow his arguments in the present article, but all who are interested in the important subject with which he dealt will do well to ponder carefully not only his observations and suggestions, but to consider that which lies between the lines of his speech. One thing Sir William would abolish is the formal medical lecture, a suggestion that will be heartily endorsed by most students and many teachers. There is little taught in the ordinary class-room lecture that could not be equally well or better acquired by the average student from a book in the solitude of his own chamber. The circumstances of medical education are peculiar in the sense that the student has to acquire a large amount of theoretical knowledge on many subjects within a limited space of time. He has moreover to submit his acquirements periodically to the test of examination. Sir William Osler drew pointed attention to one defect in the present system, namely, the turning out of men filled with theories but untrained in the actual work at the bedside, which, after all is the supreme end and aim of the whole curriculum. The medical man whose career lies outside teaching or consultant work wants a practical knowledge which will enable him to meet all the ordinary conditions and emergencies of medical and surgical practice with benefit to his patients and justice to himself. To discharge that important function intelligently it is necessary for him to know the essential principles and elementary facts of a good many subsidiary sciences. How does our present system enable him to equip himself for practice on those lines? The answer to that question, it may be feared, is hardly satisfactory. The present plan of enormously detailed study and of high standard examination too often turns out a brilliant man of the schools, whose knowledge of practical work, however, may be hopelessly cramped, and whose aptitude for the responsible handling of disease, to put it bluntly, has not been proved. There are various factors bearing upon the situation that demand critical consideration other than those of the disproportions between theoretical and practical study, the advanced teaching of subjects indirectly concerned with the medical art, and high standard examinations. The most important of all, perhaps, is the ridiculous system which sanctions legal qualification by upwards of a score of rival corporations. With the advent of a one-portal system of medical qualification some of the difficulties, at least, of the present situation would probably vanish. It is to be regretted that the majority of hospital and medical school appointments are made subject to the holding of certain qualifications. The ultimate fitness of a man for responsible posts of the kind cannot be ascertained under the present plan of cramming for high standard examinations. The failure of medical education is to a certain extent registered in the recent development of post-graduate medical schools throughout the kingdom. It is to be regretted that the whole subject of medical education is not seriously considered by a great and capable professional organisation. In the absence of any such effect it might be advantageously investigated by means of a Royal Commission.

CURRENT TOPICS.

Cooking for Health.

Man is said to be "the only animal that cooks his food." One thing he, or rather she, does not do—she does not take advantage of modern methods in cooking to the same extent as she follows the fashions. The latter change like a kaleidoscope, whereas the former slowly evolve towards perfection. Even the proverbial "dinner of herbs" loses its savour if the stalks be tough and the colour of a weird mixture, for did a painter ever catch the unearthly hue presented by a badly cooked Brussels sprout? A great deal of domestic friction, not to say misery, would be saved if the art of cooking were systematically taught to elder scholars of all classes. It is not necessary to impart a knowledge of chemical physiology to the members of cookery classes, for all that is needed is to know how to prepare an appetising meal. Much labour can now be saved by the employment of gas cookers—a fact which was demonstrated last week at the National Gas Congress and Exhibition, held at Shepherd's Bush. Good cooking is almost as much an enemy of malnutrition as the selection of the proper kind of food—a fact which was well brought out by Dr. J. Priestley, Medical Officer of Health for Lambeth, in a popular introductory lecture. A gas cooker was exhibited, the invention of a barrister, which was said not only to solve effectually the problem of open fire roasting by gas, but also to enable a cook to bake pastry without an oven. The cooker consisted of six simple parts—namely, two grids, one horizontal burner, two side supports, and a radiating sheet, the whole weighing less than 6 lbs. A cookery demonstration described by the speaker comprised the roasting of a large fowl and a loin of lamb, the baking of a raised pie and a custard, the grilling of sausages, a large *sole au beurre*, stewed kidneys *au vin blanc*, soup, bread sauce, gravy, and a rum omelette, in addition to two vegetables. This comprehensive menu, Dr. Priestley stated, was cooked in two hours at a cost of one penny for gas. Whatever be the fuel adopted, the diet of all classes will be greatly improved by its scientific preparation and cooking, having due regard for the food value of each article.

The Real Dripping.

Some consternation must have been caused at the recent meeting of the managers of the Metropolitan Asylums District last week by the announcement that certain samples of dripping delivered to the Leavesden Asylum and Darenth Industrial Colony under contract were alleged to have come from a soap manufacturer. There is dripping and dripping. The genuine, wholesome stuff that actually "drips" from the joint during the process of roasting is of the right sort and possesses a flavour that is entirely its own. Moreover, it is a most valuable foodstuff for folk whose pockets are not well lined and whose larders cannot command the more costly and somewhat more æsthetic table fats, such as butter, cream and cheese. It is difficult to imagine what flavour the spurious "dripping" would have obtained from a soap manufacturer, though, as far as its real food value is concerned, it might not come far short of the genuine article. It was stated that the dripping was chiefly required for making pastry, and that it was preferred to margarine. This reminds us somewhat of the fate of the egg which is not good enough to appear at the breakfast table.

Then as Now.

We are prone to surround the past with a kind of mystic glamour. We do not give honour where honour is new, but reserve our panegyrics for times and methods whose inaccessibility denies all chance of refutation. For example, we think the middle ages knew something about toxicology. So they did, but not a tithe of what we vaguely give them credit for. The old apothecary was not a pocket Borgia. Men were asked out to dinner and they sometimes died after it. But *post cibos* is not necessarily *propter cibos*, and one man's meat was not always poison for another. There was not always death in the pot. If we look at a sixteenth-century menu we have a general feeling not of amazement that men should occasionally die after a banquet, but rather of surprise at the survivors. Then it is probable that modern surgery would have saved some of these moribund postprandialists—that perforation not poison ushered them into the *ewigkeit*. In fact, these terrible toxicologic tales suffer from exaggeration. The morality of the times demanded sudden death in a convenient form, and an alleged supply arose. It is much the same as if our day was judged by its patent medicine advertisements. Reading them a truthful age would sigh and offer illimitable gold for what we can buy for 1s. 1½d. As a matter of fact, we don't buy them. We know that some men are liars now, but we forget that there were liars in those days.

The Logical Conclusion.

There is no possible theoretical objection to carrying a thing or an idea to its logical conclusion. Practically it doesn't work. Attention has recently been drawn to what is called momentum in evolution, which means that where a function or organ has been found to be beneficial there is a tendency on its part to grow to excess till its very preponderance outweighs all possible advantages.

In the Glacial Period there was a tiger, and the tiger found it a good thing to have big teeth. So its teeth grew till somewhere in the late Pleistocene the sabre-toothed tiger found that its canines were large enough to make existence intolerable. So with the elks. They began with smooth heads and ended ingloriously with a twelve foot span of antler, so heavy that a drink frequently connoted death. We have brains. They are our outstanding feature, and they may swamp us. So far we are rather proud of them and they have certainly stood us in good stead in our fight with the rest of creation. Mind now triumphs over matter, but mind may not always triumph over itself. Our bodies are demonstrably worse than they were, and the danger is that we may get so good at controlling ourselves that we find we have nothing left to control. Mr. Wells has foreseen this in some of his stories, and his Martians are practically button-pressing cerebra. While it is good for us to think of where we may be tending there is no need for alarm. Let us look about us, at our neighbours, and all qualms will disappear. We shall not find enough signs of hypertrophic mentality to cause us a moment's unnecessary wakefulness.

Grinders' Phthisis.

IN dealing with such a widespread disease as consumption it cannot be too clearly stated that the health of workers in special trades largely depends upon themselves. Rules and regulations have their place, but unless these are complied with they become a dead letter. Certain occupations render the workers prone to develop tuberculosis, and the condition of the lungs resulting from the continued inhalation of dust can be seen any day in the pathological museums of our large hospitals. In attempting to reduce the prevalence of phthisis among the grinders of Sheffield an informal conference was held the other day in the Town Hall of that city under the presidency of the Lord Mayor. It was pointed out that during the years before the Home Office regulations became operative, the death-rate from tuberculosis amongst grinders was fifty per cent. The problem of how to reduce this high figure is two-fold. The dust must be scientifically removed by exhaust plants and the men themselves must use the apparatus provided for preventing the inhalation of dust and keep the exhaust machinery clean. Further intelligent co-operation of all concerned in the trade is urgently needed, and the absurd prejudice against wearing respirators should be overcome at all costs. The idea of holding dinner-hour lectures, or homely talks, upon general hygiene is a good one and it should go far towards popularising the official regulations which, after all, are issued entirely in the interests of the employees themselves. As Dr. Collis remarked, "He laughs best who laughs last, and it is better to be laughed at than to be buried." The substitution of emery stones or wheels for grindstones may be welcomed if it can be clearly shown that the change would materially reduce the danger to which the grinder is exposed in his daily work.

The Medical Needs of India.

IT was particularly appropriate that Surg.-General Sir Charles Pardey Lukis, K.C.S.I., Director-General, Indian Medical Service, in his opening address delivered at the London School of Medicine for Women last week, should have selected as his topic the consideration of some of the medical problems of our great Indian Empire. That Indian women still need the medical services of their European medical sisters is well known, but the work of the medical woman in India should not be confined solely to the care of women and children. As a matter of fact, a real need exists for the instruction of the female population of India in the laws of simple hygiene, especially in the matter of the prevention of disease, for in this way there is some chance of influencing the national health of the country. The systematic instruction of native midwives in modern midwifery, if undertaken by thoroughly-trained Europeans, should go far to reduce the still too high mortality from child-birth. Now that a service of medical women under the Central Committee of the Dufferin Association, known as "The Women's Medical Service for India," has been approved by the Government of India, the conditions under which medical women will be able to work will give this branch of the profession an assured and definite position. An immense sphere of work is now open to the highly-trained medical woman who wishes to devote her professional services to the physical betterment of Indian women. The fact that private practice is to be allowed, so long as it does not interfere with the performance of her official duties, and that the terms are better than those offered to young officers of the Indian Medical Service, should render the new service an attractive one to medical women in this country. The Government of India, realising the need for utilising indigenous talent, has given a site for the erection of an up-to-date medical college for women, with a hospital of 150 beds attached, at Delhi. This institution will be entirely staffed by women, and it will afford unrivalled opportunities for professional, tutorial and research work which could not otherwise be obtained.

Literary Medical Men.

IN his opening address at the Middlesex Hospital recently, Mr. Sampson Handley, in discussing with real insight the value of medicine as a liberal education, paid particular attention to the part medicine played in the training of medical men whose distinction came mainly outside the medical career. It was perhaps the fact that the present Poet Laureate was for several years a practising physician, which led Mr. Handley to his choice of a subject. From St. Luke to Sir Conan Doyle, medical men have won distinction as writers. Mr. Handley mentions in particular the great names of Goldsmith and Keats. He does not make any attempt to furnish a complete list, or the names of Arbuthnot and Smollett should not be omitted. Charles Lever, whose novels nowadays hardly attract the attention they deserve, was a medical man, who worked hard during the outbreak of cholera in Derry. In later years he practised as a physician abroad. At the present day, in addition to Mr. Bridges, we can boast of another scholarly poet, Dr. John Todhunter, a member of our profession, who practised as a physician in Dublin for several years. Mr. Handley adds references to many medical men who gained distinction in science and politics. In travel we have many also of whom to boast.

University Education in London.

MUCH has been written of late respecting the university education of the medical student in London. This was the main theme of the address delivered at Charing Cross Hospital Medical College by Dr. William Hunter, Physician to the Hospital and Dean of its School. The English tradition of the freedom of the hospitals for purposes of clinical instruction is one which has been well described by Mr. Abraham Flexner in his able report upon medical education in Europe. "The medical student in England can really use his material; he has almost as easy access to his patients as the physician has." Here is the keynote to the success of the clinical training in this country as compared with that in Germany. The relations between the university of London and the great teaching hospitals have always been friendly and helpful, and so they have between the hospitals and their medical schools. It will not be disputed that the findings of the Royal Commission on University Medical Education in London with regard to the necessity for grafting on great laboratory institutes to the large teaching hospitals, after the German fashion, are strictly in accordance with the progressive scientific spirit of the age. When a "small compact Faculty of Medicine" has been created for London University which shall not be merely advisory, but made responsible for the educational arrangements and provision, subject to the control of the Senate as regards finance, we may expect to see university medical education in London work out, as Dr. Hunter estimates, to at least £70 to £80 a year per degree student, which is still a good deal less than in a German university.

The Royal Sanitary Institute.

The custom of holding provincial meetings, indulged in by many of the medical societies having metropolitan headquarters, has now become quite an established feature in the programme of these bodies. Apart from annual congresses, which may be held in any large centre, there is much to be said in favour of holding one meeting, at least, in each session in some provincial town. Opportunities are thus afforded for greater interchange of ideas and for country members to take a more active part in the proceedings of the society than they would otherwise be able to do. An attractive programme for the next provincial sessional meeting of the Royal Sanitary Institute, to be held at Newcastle-upon-Tyne on October 17th, has been arranged. Dr. Philip Boobyer will preside at a meeting in the Council Chamber of the Town Hall, at 7.30 p.m., when Prof. J. Hutchens, D.S.O., M.A., M.R.C.S., D.P.H., will open a discussion on "Some Points in the Relationship of Human to Bovine Tuberculosis." Dr. S. J. Clegg will also introduce the subject of "Housing Problems in a Northern Industrial Town." Many prominent local medical men have signified their intention of taking part in these discussions. On the following day a demonstration is to be given of a new electrolytic treatment of industrial lead poisoning, and a series of visits to local works and other places of interest has been arranged for. The local Honorary Secretary of the meeting is Dr. H. Kerr, Medical Officer of Health, Newcastle-upon-Tyne, to whom early notification should be made by intending visitors in order to facilitate proper arrangements.

Damages against a Panel Doctor.

A case of much importance to the medical profession last week came before Judge Thomas, of Liverpool County Court. The parents of a young man, a minor, sought to recover £2 6s. damages from Dr. John Dunlop, of Anfield, for failure or refusal to attend their son after having accepted him as a panel patient. Several messages were sent during the day, and as the doctor did not attend, the lad's father called in another medical man, who found him suffering from pneumonia. Counsel for defendant urged that as the contract for medical attendance was made with the Insurance Committee any action for neglect must be brought against the Committee and not against the medical men who were employed by the Committee. His Honour found against the defendant, both upon the legal points and upon the facts, and expressed an opinion that the defendant was actuated by temper. He gave judgment for the plaintiff, with costs, and allowed an appeal. A brief report of the case will be found in the news columns elsewhere in our present issue. The case will in all probability go to appeal, so that further comment must be deferred for the present.

PERSONAL.

Dr. T. Hood has been appointed Principal Medical Officer of Southern Nigeria.

Dr. Preston King has been chosen Mayor for the ensuing year by the Bath City Council.

Dr. F. M. Sandwith will preside at the annual dinner of the London School of Tropical Medicine, to be held at Prince's Restaurant on Friday, October 24th.

Sir David Ferrier, F.R.S., M.D., will deliver the Presidential Address at the first meeting of the session of the Medical Society of London on Monday, October 13th, at 8.30 p.m.

A monument in honour of Dr. Frederick Bode, who was one of the first to recognise the medicinal properties of the Nauheim waters, was recently unveiled at Bad-Nauheim by the Kurdirecteur.

Col. B. M. Skinner, A.M.S., will deliver the Presidential Address before the United Services Medical Society, Royal Army Medical College, Grosvenor Road, S.W., on October 9th, at 5 p.m.

Among the 218 lecturers who addressed large audiences on Monday evening last to inaugurate a reorganised evening educational system under the London County Council were Sir Victor Horsley and Dr. Robert Jones.

Dr. Edward James Nix, M.D., of Weymouth Street, Portland Place, W., Physician to the All Saints' Children's Hospital, Margaret Street, and to the St. Elizabeth Home for Incurables, Mortimer Street, left estate of which the net personalty has been sworn at £23,032.

Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, will give a demonstration of pure cultures of spirochætes and of his recent researches upon the virus of rabies at a meeting of the Royal Society of Medicine, to be held on Monday, October 13th, at 5.30 p.m.

Mr. G. A. Berry, P.R.C.S.Edin., will deliver the opening lecture of the winter session at the Royal Eye Hospital, Southwark, on Monday, October 13th, at 4.30 p.m., on "The Causes and Symptomatology of Impaired Retinal Activity." All medical practitioners and students are invited.

The following medical men have been appointed as Medical Referees in London by the London Insurance Committee for a period ending Christmas, 1913:—West District: Arthur Stanley Woodwark, M.D., B.S.Lond., M.R.C.S.Eng., L.R.C.P.Lond. North District: John Herbert Burroughs, M.R.C.S.Eng., L.R.C.P.Lond. East District: John Fletcher Porter, M.B.Lond., L.S.A. South-East District: Hugh Davies, M.B., B.S.Lond., F.R.C.S.Eng., L.R.C.P. London. South District: Eric Bayley, M.D., B.S. Lond., F.R.C.S.Eng. South-West Distrist: Reginald Crosse, B.A.Cantab., M.R.C.S.Eng., L.R.C.P.Lond.

CLINICAL LECTURE

ON

A PRACTICAL CONSIDERATION OF VACCINE THERAPY. (*a*)

By WYATT WINGRAVE, M.D.,

Pathologist and Dean to the Central London Throat and Ear Hospital, and Resident Pathologist at the Polyclinic.

Gentlemen,—I want to-day to review a few points in regard to vaccine work, as there are some practical aspects which we can profitably discuss, and which have an important bearing. I do not propose to enter into much detail, but rather to give you the chief items shorn of technicalities which you will find useful in considering the therapeutic aspect.

First of all, what is a vaccine? There is vaccine therapy, and serum therapy. In vaccine therapy we have the introduction of a substance into the body which we call an "antigen," that is to say, a something which has the power of generating in the body an anti-substance, which confers immunity. There are substances in the blood itself which do this, and these we speak of as *natural* antigens, in contradistinction to the immunity which we create by injecting a substance which confers *artificial* immunisation. These antigens when injected into the blood give rise to the production of opsonins.

A micro-organism presents two varieties of poisons: endo-toxins, which are inside the bacillus, and exo-toxins, which are outside. A sharp distinction must be drawn between those two. The best example of an exo-toxin is diphtheria. There are relatively few bacteria which are of this kind. Most bacteria are endo-toxic. We have a natural immunity to diphtheria, but it is very feeble; therefore we turn to one of the lower animals which possesses a high immunity, such as the horse. We increase that horse's immunity by giving him more diphtheria bacilli, and so bring it up to a very high standard. And when we have reached a certain standard, which we test by injecting a guinea-pig with a given quantity of the toxin of horse serum, we find that we establish a unit, and that is the basis of the anti-toxin. We do not deal with the bacteria at all in this case. You could not kill the diphtheria bacilli without killing the patient first. Fortunately, the diphtheria symptoms do not last for long. Bacilli produce in the patient a large amount of poison, and then seem to disappear; but they do not disappear; that is the point. Though the symptoms may disappear, the bacillus may remain for a long time locked up, and may go on multiplying in the accessory sinuses of the nose without causing symptoms. That is difficult to explain. Some say it is because the bacillus becomes so attenuated by subsequent growth that it produces very little exo-toxin. In typhoid, also, the patient may be a typhoid carrier a long time after he has ceased to show symptoms of the disease.

That is serum treatment. But to-day we have to consider treatment by means of vaccines. Vaccines are directed particularly towards the endo-toxins, which are very closely locked up in the bacillus. You may ask how then is it that we get symptoms? For the simple reason that every micro-organism possesses what is called an autolysin, which liberates some of the endo-toxin. But the amount of endo-toxin liberated is very small. In pyogenic infections we have an enormous number of bacteria compared with the small number at work in diphtheria. Yet sometimes a small number of bacilli will produce a given symptom. Let us take a case of ordinary staphylococcal infection. In an ordinary case there may not be much constitutional disturbance; but you may have a case in which disturbance is enormous; it may kill the patient in two or three days. This suggests that there are different varieties of staphylococci; in fact, there are as many varieties as there are of potatoes or pears, and that they vary in their virulence. One form may kill the patient in two or three days; another variety may not kill, and the patient may be subject to that infection for months, or even years (*e.g.*, furunculosis). You cannot demonstrate the difference morphologically or by culture, because in cultures we recognise only three varieties—aureus, albus, and citreus. They vary enormously, and therein lies the essential difference between auto-vaccines and hetero-vaccines. The vaccine is the "hair of the dog that bit you," and no other hair, nor any other dog's hair. We are really reverting to what the lower animals have always practised. Take the case of the dog licking his sores; he is practically giving himself an auto-vaccine, and a very good one too. He is licking up the bacteria from his wound and killing them by probably the acidity of his stomach; the endo-toxins are liberated in his stomach and bowels, they are absorbed by the blood, and then set up an immunity. Such in the dog is a perfect example of auto-vaccine, in contradistinction to a hetero-vaccine. Of what use would it be for that dog to lick the sore of some other dog? None; it is its own bacteria it wants, and it is its own endo-toxin which does good. This endo-toxin can only be liberated when the organism has been killed. So in dealing with a vaccine, our first duty is to demonstrate the presence of an organism in the discharge or in the pus. You try to identify it tinctorially and morphologically, and next you grow it, and, we will suppose, you have produced a good crop of bacteria with their endo-toxins. If you were to make a glycerine extract of the living organism, and inject it into the patient, all that would happen would be, probably, a distinct elevation of temperature, but nothing more than temperature. So what you have obtained is a substance which we call *pyrogen*, a temperature-producer. But if you kill the organism, you get another thing altogether, which is an antigen. The theory has recently been evolved that the pyrogen part is produced in and remains in the medium in which the organism grows. If that were the case, you would expect that if you took the growth from the broth and used the broth, you would have your pyrogen as well as the antigen. But as a fact you do not. I have been testing it very carefully, and I find that the organisms grown in broth do not contain any more pyrogen than those grown on agar or any solid medium.

(*a*) Lecture delivered at the London Medical Graduates' College and Polyclinic on June 27th, 1913.

So when the bacillus is killed and you have made your emulsion, you are now going to inject a distinct substance, an antigen, for the production of an anti-body, and a pyrogen which produces temperature. I am inclined to think that this pyrogen is neutralised in the very act of making the vaccine; because we heat it up to 60° C., and by doing so, it is likely the pyrogen is got rid of. So we have now only to deal with the antigen. Having grown the organism, you now treat it with some normal saline solution. Stir it with a platinum loop and make an emulsion, when it becomes opaque. Under the microscope you can now see what it consists of. We are not going to trouble ourselves about isolating: we do not want to isolate. When vaccine therapy was first introduced, an immense amount of time was wasted in isolating bacteria. If you subculture and separate bacteria, you attenuate them, so that your last culture is probably a characteristic organism under the microscope, but it has lost all its power. So what you grow is made into a vaccine, though one of the varieties of organism is probably more important than the others, and it is that important one which you go for. You have killed them all, and consequently you are doing no harm by injecting their products; but by injecting you are bound to get the right one. Greater precision would be shown by separating them and injecting them, and taking opsonin observations for each; but what a long time that takes; it is a fearful task, and before you have done that the patient is either dead or cured. Having obtained the emulsion, your next duty is to find out how strong it is: in other words, you want to standardise it. That is very simple, for you find a very good standard in blood. Blood contains five million red corpuscles to the c.mm.; consequently you take one drop of blood, one drop of this emulsion, and one drop of citrate, mix them and count; and you know if you have five million red cells and five million bacteria in the film it is the same strength, and you know what dilution is required. If you wish to give 500, it is simply a question of a sum. I prefer to use, in diluting, tricresol and normal saline. Formerly carbolic acid was used, but that is undoubtedly toxic, and some people do not stand it; the smallest quantity in some people causes carboluria, and moreover, carbolic acid has been shown to have a distinct influence on the endo-toxin. Moreover, tricresol is about the best antiseptic you can possibly use. It is oily and will not mix with water, and so I make a 10 per cent. solution in alcohol and keep it as stock. This is diluted ten times to make it one per cent. It is one of the best mixtures you can have for sterilising skin and instruments, for it has a wonderful power of killing bacteria without precipitating proteids and without destroying the very things we want to save. Then you sterilise it, and this should never be done at a higher temperature than 60° C.; otherwise you will destroy the very substances you want to keep, the antigen. That is done for half an hour, and it suffices for nine-tenths of the bacteria. But sometimes we come across sporing bacteria, and you know how difficult it is to kill spores. So you examine most carefully under the microscope to see if any are present. If you find any suspicion of sporers you must sterilise a second and even a third time, with 24 hours intervals. If there are sporers, at least three days longer will be required for the preparation of the vaccine. Then 1 c.c. is put into a capsule, sealed, and then put into the steriliser for 15 minutes at 55° C. The vaccine is now made.

You will forgive me if I say a few words as to how it should be used. Your syringe should always be kept in tricresol one per cent. Your needles, if they are steel, or even more expensive ones, should be kept in paraffin. Before using the needle, heat it in the flame to make liquid any paraffin remaining in it, and expel it. Then see if your syringe is working. Always shake the capsule well before you start, because bacteria settle at the bottom. Then file a little nick in the neck, break off and charge the syringe, but do not drag out the piston, otherwise you will get air bubbles in; but remove it gradually by twisting. But there are always bacteria, especially staphylococci, lurking in the skin, consequently you may easily introduce a few of these. You should take some strong tricresol 10 per cent. on a piece of cotton wool and rub the skin with it. That will kill a large number, though it will not kill all. You cannot thoroughly sterilise the skin, do what you will. You may even try the modern iodine method.

Now let me consider with you some details in regard to suppuration. It is a story which cannot be related too often, because it tells us the inwardness of our work. Certain bacteria are introduced into the tissues, but remember, suppuration can be brought about without bacteria; chemical agents, such as biniodide of mercury will produce it; so will heat, and indeed anything which will produce fresh leucocyte activity. Suppose we are dealing with an infection causing suppuration. As soon as bacteria enter, our policemen, the leucocytes, are set free. The leucocytes are poured into the abscess cavity, and eat up the bacteria. But after a time, if you were to examine the pus, you would not find so many phagocytes as in the early stage; moreover, each will contain fewer bacteria. Later still, the leucocyte will be practically empty. Why? For this simple reason. The micro-organism produces what is called a leucocydine, which acts upon the leucocyte and paralyses it, so that it can no longer eat up the bacteria; and by and by the leucocyte is not only paralysed but is killed and becomes granular and is broken up, and when it is broken up it is a true pus cell. What does it contain? A most important substance, trypsin. It is most potent, because it has power to dissolve living tissue as well as dead; it will dissolve bone, muscle, ligament, cartilage, as readily as soft tissue. That is how an abscess cavity is made. The extension of the pus is not by pressure only, but by actual solution of the living material. So we have got an enormous number of bacteria, a large number of dead leucocytes, some living leucocytes, and an enormous quantity of toxins from the bacilli, with trypsin from the leucocytes. These get absorbed, so that eventually there is toxæmia. But if the pus is allowed to remain there, sooner or later you get bacteria in the blood, causing a true pyæmia. Hence, the moment we recognise pus, we let it out. We do so first to get rid of as many bacteria and their toxins as possible, and secondly, for the purpose of removing the trypsin, and so preventing any further extension of the cavity. You know how red the skin gets round the orifice of a fistula or a sinus. That is because the trypsin from the dead leucocytes is acting as an irritant of the epidermis and as a solvent; so that it is best to put a little vaseline on the edge of a sinus to protect it from the discharge. You know a running from the nose due to a cold will set up a distinct erythema of the skin, and that even little papules will form. Having got rid of the substances I have named from the abscess cavity, we have a chance of doing some good. We inject vaccine. What is the result? Probably this abscess or suppurating focus still goes on. You want something to help the vaccine; there is what Wright calls "a choked filter," *i.e.*, the barrier between the blood and the abscess cavity is blocked by dead tissue, coagulated fibrin, and such like. You can unchoke that filter in two ways. First, you can do it by Bier's mechanical method of decompression, exerting a *minus* pressure on the part If it be a carbuncle, apply a cupping-glass and suck out the air until blood actually appears on the surface. Or you may syringe out the cavity, or introduce into it gauze saturated with a weak citrate solution. This consists of sodium citrate one per cent., sodium chloride about two per cent. The citrate dissolves the coagulated blood and lymph, and the sodium chloride sets up an exosmosis, consequently the leucocytes and the serum can readily pass through that choked filter and get at the bacteria in the suppurating focus. So by negative pressure you are helping the flow of blood to the part, and you have an osmotic flow outwards towards the infecting point.

What do we mean by an opsonin? What have we injected? We have injected what is practically a soup; we have made a broth of the killed bacteria, which is valuable to us for the endo-toxin it contains. We inject this antigen into the blood; it does nothing of itself, but it gives rise to the production in the body somewhere or other, probably in the lymphatics, of an opsonin. There are two views with regard to the action of opsonin. One is that the opsonin renders the bacillus more tasty to the leucocytes; the other that it does not act on the bacillus so much as on the leucocytes; it is a stimulant to the leucocyte, and acts on it like a tonic. Probably the real position is midway between the two. What happens is this: we give an additional quantity of immune substance to the person, and this renders the bacteria more readily eaten up by the leucocytes, and partly acts on the leucocyte itself. The immune substance is not in the leucocyte, it is in the serum. Wright's theory tells us that the leucocyte is an indifferent quantity; that the leucocyte is of little importance beyond the fact that it is a scavenger, and that we must look for our protection to the substance in the serum, which acts on the bacillus only. It is like two men sitting down to lunch, one being very hungry, and the other not. The hungry man wolfs up his chop quickly, but the other calls for some sauce, for he cannot eat his chop until it has been well sauced. Our leucocyte cannot eat the bacillus until it has been well sauced, and our opsonin acts the part of the sauce. Whatever view we take, we are bound to admit this: that the outcome of injecting the antigen is the production of a new substance which is something in the nature of an opsonin, which turns the bacillus in such a way as to make it digestible. It is digested and taken up by the leucocyte and rendered harmless. Immunity varies considerably. It may last only a few days, or it may last a lifetime. Probably it is kept going by the presence of the organisms themselves. This is well shown in the pathologist who in spite of perhaps daily infection is none the worse for it, but after his autumn holiday immunity is lost, and the slightest infection causes trouble until immunity is recovered in the course of his work.

Now a few words about the difference between vaccines for acute cases and vaccines for chronic cases. In acute cases you must deal with the case a little differently from chronic. Fairly big doses should be used and given fairly often. But in chronic cases you give moderate doses, and at fairly long intervals. The first dose of a vaccine should be half the maximum strength. The second dose, on the third day, should be full strength, and that should be repeated every eighth day. As the patient begins to feel a little better, you may want to give more. Do not give a bigger dose, but simply diminish the interval between doses. But in acute conditions, as those of gonorrhœa and pneumonia, you may gradually increase the dose. Working from stock vaccines, you have capsules of different strengths. Begin with 50 million, then go to 75 million, then 100 million, 150 million. But that is not so easily done in auto-vaccine work. It is made up of one strength, and you vary it by varying the interval, not the actual dose.

I will now refer to anaphylaxis. When you inject the first dose, there may be no signs; you inject a second dose, and probably there is a flare-up, but not a severe one. You inject a third dose, and there is a terrific flare-up; indeed the patient is so intolerant of what you have injected that you may hesitate about giving another dose. But give him his fourth dose, and the alarming symptoms may subside. This flare-up on the second or the third day is simply due to the rapid accumulation of the immune substance; in other words, the antigen which you have given has not had time to manufacture a full amount of opsonin. But you need not fear anaphylaxis, because when dead bacteria are injected, the pyrogen has been got rid of, and there is insufficient to cause a high temperature. Some bacteria possess more pyrogen than others.

In this Polyclinic we cover a wide field. In the last few weeks I have had several very good illustrations of vaccine for hay fever. There is a great deal of hay fever on paper, but very little in actual experience; when one meets with supposed hay fever, there is generally found something to account for it, and the case is found to be innocent of hay pollen. These cases are found in parts of the country or world where hay does not even exist. You will generally find there is some irritability of the optic nerve; a man says he cannot play a round of golf in the glare of the sun, or cannot tolerate the presence of chalk cliffs, and he attributes it to hay fever. Give him a pair of blue glasses, and his photophobia will disappear. Or take another case. The discharge is very profuse. On examining it, you probably find a number of oxyphyle cells. You say it is hay fever. Examine for bacteria, and you may find plenty, perhaps two or three varieties, but no hay pollen. The patient's accessory sinuses are probably excellent culture tubes, and the scavenging leucocytes are not turned out in sufficient numbers to deal with them. But capture the bacteria, make a vaccine and inject it, the leucocytes at once begin to do their work, and an artificial immunity is soon produced sufficient to get rid of the immediate attack. Sometimes no second course is needed, but two are generally all that are necessary. There is a form of trouble supposed to be hay fever in which there are no bacteria, but in the free discharge from the nose there are a number of cells. You will nearly always find sugar in this flow. It is a leakage of fluid from the cranial cavity, the overflow of subarachnoid fluid passing down the nose, over the olfactory nerve, and into the nose. It is a safety valve, and does no harm. It varies with the arterial tension, and if you give a mild course of mercury, or effervescing sodium phosphate, you will generally reduce the arterial pressure, and with the addition of ammonium bromide the whole condition will disappear. But if you start local analgesia, such as the application of cocaine, atropine, and morphine, you set up a vicious circle, and the more the patient has, the more he wants. The most common group is that in which the nasal flow is the result of some local condition, such as an enlarged turbinal, or a spur, or the distension of a sinus. But in some few cases the patient is firmly convinced, in spite of all you say, that the pollen is responsible for his trouble, so he has a "specific" injected, and he promptly gets well, or not.

The opsonic index, so far as its practical application is concerned, is seldom used, because it is very tedious, although it is extremely valuable. Instead of it you can take the phagocyte index, which is very simply and easily done, and very reliable. You have an emulsion of bacteria, and a solution of sodium citrate. Puncture the patient's thumb. You have a certain distance marked out on your pipette, up to which a certain quantity of citrate solution is sucked, then a given quantity of blood, then a given quantity of bacteria, and blow them on to the slide; mix and return to pipette, seal, and then incubate for 15 minutes. Take off the cap, break off the end, and blow the mixture on to a slide and make a film. Stain by thionin or James's solution, and count. You do the same with your own blood for comparison. So it is simply comparing the phagocyte hunger of the patient with your own. The opsonic index is complicated, and rests upon the testing of the serum only. No two observers give exactly the same figure; it is necessary to take a number of observations, and get the average.

The diseases for which I have prepared vaccines at the Polyclinic cover a very wide range, and the results obtained are most gratifying, especially in cases of chronic arthritis, nasal pharyngeal catarrh with sinusitis, chronic bronchitis and bacteriuria. I am preparing an analysis which will be published shortly in the Polyclinic Journal.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal, The lecture for next week will be by Professor Leon Berard, Surgeon to the Hotel Dieu, Lyons. Subject: "The Treatment of Fractures of the Skull by Lumbar Puncture and Early Trephining."*

ORIGINAL PAPERS.

A GENERAL VIEW OF MALINGERING. (a)

By F. S. PALMER, M.D., F.R.C.P.Lond.

Physician to the West-End Hospital for Diseases of the Nervous System.

The term malingering, derived from the French adjective *malingre*—weakly or sickly—had acquired a special significance and much wider application. The present-day interpretation of the word included the *suppressio veri*, as well as the *suggestio falsi*, and the reason probably was, that there was no essential difference between the simulation of disease to extort money from an employer, and the deliberate concealment of known ill-health to defraud a company or corporation. Formerly it was chiefly encountered in the Army and Navy, among prisoners, and the inmates of hospitals and workhouses, but recently it had become more general, particularly among industrial workers. Anyone who wilfully feigned, induced or protracted an illness or disability to avoid work or punishment, or deliberately concealed the existence of a disease, of which he had certain knowledge, to gain some desired end, was a malingerer. Among the influences which promoted malingering was the trend of modern legislation. Since the Workmen's Compensation Act of 1906 came into operation the number of claims had gone up by leaps and bounds, and precisely the same experience was reported from France and Germany, where the accident laws were older than our own. Employers had discovered that it was cheaper to settle claims out of Court than to contest them. Allegations had been made that medical certificates were too loosely given, but since the members of the Friendly Societies had been informed that the State pays, the sharp look-out for malingering was no longer maintained. Although the activities of some speculative lawyers and so-called Legal Aid Societies stirred up strife between employers and employees and encouraged malingering, it was a great mistake to suppose that the enormous increase of claims admitted by most of the approved societies was due entirely to malingering. It was true only to a limited extent. The National Insurance Act had opened a new and perilous chapter in history and unlocked the floodgates to the risk of malingering on a scale hitherto unknown, which would be felt more on the medical than on the surgical side of the profession. The inclusion of women into the scheme, and the relaxation of the rule of medical examination had admitted a number of sickly and delicate persons who were a constant drain on the funds. Six months' working of the Act had shown that the sickness claims of women were amazing. People who had been promised a liberal exchange for their contributions were not likely to overlook the obligations on the other side of the bargain, as the desire to get something back for what had been paid was a human failing. The logical sequence to compulsion was resistance, and that it would take the form of malingering in many instances was a certainty. The psychology of malingering was a complex and interesting study. Pecuniary gain was not always the underlying motive, but often other influences were at work—such as idleness, sympathy, notoriety and resentment. When a workman or other person is well, or it may be better, provided for during sickness, the tendency to delay the return to work was only human. Hitherto the largest proportion of claims were for the results of accident or injury, and the extravagant damages demanded from wealthy employers, corporations or the State were often astonishing. The elasticity of conscience where railway companies were concerned was proverbial. Many persons fit to return to work were restrained from making the attempt, when litigation was in the air, by the fear that it might prejudice the issue. Introspection, suggestion, repeated medical examinations and consultations with solicitors, according to the psychological law led to the intensification of symptoms, and so long as these mischievous agencies continued in operation the abnormal mental condition was not likely to improve. Although it was the duty of the profession to discountenance any kind of fraud which came under notice, no doctor was expected to undertake the duties of a detective. If he acted in good faith not much was to be feared, and no sensible medical man would make an accusation of malingering unless he was prepared to bring forward positive evidence in support of the charge. His reputation and existence were at stake, and little mercy would be shown him for a mistake. Precipitate action was to be condemned. In doubtful cases it was far better to be deceived than allow unjust suspicion to fall on the victims of some obscure or depressing disease. The odium of an accusation of malingering should rest with some independent person to whom the case was referred, and not with the practitioner.

(a) Presidential Address delivered at the opening of the West London Medico-Chirurgical Society, October 3rd, 1913.

The essential feature of malingering was deliberate deceit to gain some desired end. Valetudinarianism occupied a different position and would be dealt with separately. The methods of malingering were difficult to group, and Dr. Palmer considered them under the following heads: (1) Personation was very rare in this country and entailed great risks. If detected it speedily brought the offender within the meshes of the Criminal law. (2) Simulation was exceptional, the word was often misused, it meant an imitation or sham. To counterfeit the symptoms of organic disease successfully required a high order of intelligence, combined with remarkable powers of memory and attention. Few, if any, doctors could be found to coach the performer. It was always overdone. Hysteria imitated disease better than any simulator. The type of disease usually selected was some functional disease of the nervous system, since it could be more easily feigned, required no special knowledge, and was less likely to be detected. (3) Substitution of origin, date or material was quite common. Attempts were frequently made to attribute the symptoms of pre-existing organic disease to recent shock or traumatism; specimens of urine were often substituted and several examples illustrating this form of deception were quoted. (4) Exaggeration of symptoms was a very popular form of malingering. When obviously magnified detection was comparatively easy, but in the minor degrees it was more difficult. Valuable help was often obtained from careful observation of the appearance, attitude and behaviour of the examinee. There was much to be said in favour of the German plan of compulsory hospital detention in doubtful cases. (5) Concealment of disease was not always fraudulent, but when adopted for the purpose of imposing on life assurance or other companies it assumed a very serious aspect. (6) Hunger striking was a despicable form of malingering when practised to escape punishment for misdeeds. If criminals who resorted to such means were sane, there were no reasons (except political or sentimental) why the law should not take its ordinary course, without distinction in their favour.

Valetudinarianism was of great importance from the medical standpoint. Many of these cases, no doubt, came under the head of unconscious or subconscious malingering, but it also included a considerable proportion of genuine invalids who demanded our utmost sympathy and protection. How were they to be distinguished? Surgical cases gave far less trouble than medical ones. There was not much scope for fraud in visible physical injuries. The surgeon sees and the physician is often in the dark. When objective signs were present they could be deciphered on regular lines, but if the complaints were only subjective one had to rely on the none too reliable statements of the claimants. Some of the so-called functional cases deceived the very elect. Insanity was more frequently feigned by criminals, or persons of the better class charged with theft, or offences against morality; epilepsy by mendicants to deceive the charitable. Hysteria and neurasthenia, with their combinations, presented special attractions to the dishonest. Hysteria was a psychical disorder revealing itself by certain stigmata, mainly objective, which could be tested. In neurasthenia there was no antecedent condition except in neuropaths. The symptoms were mostly, if not entirely, subjective, but none the less real and distressing to the victim. Small wonder, then, that neurasthenic disturbances were the favourite complaints of impostors. They had little to learn, and their statements were difficult to disprove. In all such cases, however, there was ever present the possibility of some underlying organic cause. Before a diagnosis of functional disease could be made organic signs must be eliminated from the field of inquiry. Experience had convinced the speaker that the sufferings of the true neurasthenics were only too sad and genuine, and the sooner this fact was recognised outside the medical profession the better. To brand them with the ugly name of malingerer was both cruel and unjust. Finally he dealt with the prevention of malingering, and made the following suggestions for the arrest of the growth and extension of this serious evil. (1) The appointment of medical referees of wide experience who should be independent—specialists in their particular departments of medicine and surgery. (2) That medical assessors should sit with the arbitrators or County Court judges to interpret medical evidence. (3) A system of organised lay inspection to visit houses and ascertain facts. (4) Compulsory detention in hospital of doubtful cases. (5) A time limit to functional illnesses. (6) Periodical medical examination of suspected cases by independent practitioners. (7) Some system of registration by which the benefits of claimants from all sources could be made known.

FURTHER INVESTIGATIONS UPON ACUTE RHEUMATISM. (a)

By F. J. POYNTON, M.D.,

AND

ALEXANDER PAINE, M.D.

At the International Congress held in Madrid in 1903 we demonstrated our reasons for the statement that we had made in 1900 that acute rheumatism was the result of an infection by a diplococcus of the streptococcal group, which we placed between the pneumococcal and septic streptococcal infections. Since that date we have been engaged in supporting our statement by additional evidence, and in following out the logical conclusions of such an assertion by a study of the influence of variations in the virulence, dosage and duration of the infective processes in man and animals, and an investigation of the various organs that may be attacked. Our evidence based in 1903 upon some 30 cases now rests upon the investigation of nearly 100, and our view as to the causation of the disease has in no way changed.

The problems that arise from a study of the variations in virulence and duration of the infection are, we believe, of the greatest importance in practical medicine. Thus, for example, what will be the result of a persistent and virulent rheumatic infection of a cardiac valve? In answer we would say that we have been led by experiment and clinical investigation to make this further statement, that this diplococcus is a cause of malignant endocarditis, or in other words, that rheumatism may be a cause of this deadly disease. Further, that at the bedside every gradation from simple to malignant endocarditis may be detected.

(a) Paper read before the Section of Medicine, International Medical Congress, 1913.

The connecting link between simple and malignant endocarditis most easily recognised is the very important combined aortic and mitral rheumatic endocarditis which occurs so frequently in children and adolescents. This combined lesion is one which, in our opinion, not infrequently foreshadows a malignant tendency in the rheumatic process, and is later in life particularly liable to develop into the true malignant rheumatic type. The damage to the two valves may occur during the same illness, or the aortic valve which is usually involved the later may be attacked in a recrudescence, or lastly, in a second attack of rheumatism.

Our reasons for the statement that we believe there is a rheumatic malignant endocarditis are the following:

1. Clinical investigation supports this view.
2. The minute examination of the morbid anatomy in man and animals also supports this view.
3. A diplococcus, identical so far as we are able to ascertain to the "diplococcus rheumaticus," isolated from the simple endocarditis can be also isolated from vegetations of the malignant type.
4. This diplococcus may, in animals, produce on intravenous inoculation, either simple or malignant endocarditis, or transitional types, or a carditis, or the entire picture of acute rheumatism.
5. It may produce in the same animal an acute rheumatism which is recovered from, and on reinfection a malignant endocarditis.

We show specimens and drawings in support of these statements.

This is one point to which we have devoted much attention. Another is to the study of non-suppurative arthritis.

By experimental investigation we have proved that this diplococcus which usually causes a transitory polyarthritis may also produce the following results.

A severe and chronic periarticular arthritis, a monarticular osteoarthritis, a destructive non-suppurative arthritis with guttering, dislocation, erosion of bone, lipping, ulceration, and fibrillation of cartilage, and profound muscular atrophy. Not only have these results followed, but periosteal nodes, precisely similar to those seen in severe rheumatoid arthritis in man, may result from this infection.

We would repeat that the arthritis is non-suppurative, and add that the exudation may be actually sterile.

So far, then, as the arthritis is concerned, it is apparent to us that the infective agent of acute rheumatism may produce all the lesions which have been claimed to occur in those forms of arthritis included under the vague term "rheumatoid arthritis."

We do not pretend for one moment that acute rheumatism is the only cause of rheumatoid arthritis, for that would be most unjustifiable, but we do believe that these investigations throw considerable light upon the pathology of non-suppurative arthritis. The difficulty there may be in animals of isolating the infective agent from the joints which we know from the certain facts of experiment are attacked by an infection, throws interesting light upon the acknowledged difficulty there is in the discovery of the infective agent in the chronic non-suppurative human arthritis. The explanation lies in the great power the synovial tissues possess for destroying the diplococci and other micro-organisms, together with the fact that it is in these tissues that they are chiefly located.

We illustrate the statements that we have made by our specimens and drawings.

Another condition we have investigated further is rheumatic chorea, and in addition an example of rheumatic hyperpyrexia.

In the examination of the morbid anatomy of chorea, we had the help of Dr. Gordon Holmes, and the results we obtained may be summarised as follows:

1. We have found the diplococcus in the pia mater and brain in the cases of fatal chorea.
2. In the pia mater it produces perivascular exudation and the condition now recognised under the term "submiliary nodules."
3. In the brain it causes perivascular changes of the same order, with minute thrombosis and consequent foci of softening and also sometimes minute hæmorrhages.
4. The brain-cells show widespread chromatolysis. The axones are but slightly damaged, but degeneration of some of them can be detected by the usual methods.

The result of our examination of the case of rheumatic hyperpyrexia was to strengthen the view that it was a result of a virulent toxæmia rather than an overwhelming invasion of the tissues of the brain by the diplococci.

These facts are illustrated by these figures taken from the microscopical preparations shown at the various societies.

Another point to which we have directed particular attention has been the condition of the tonsils in the rheumatic. Our investigations have led us to these conclusions, that one certain path of infection is from the inflamed tonsils, and that the chronically enlarged and diseased tonsils so often met with in the rheumatic may also harbour the infective agent, and the attacks of sore throat may then prove a continual menace to them by permitting reinfection of a greater or lesser degree of severity.

The evidence rests upon the isolation by plate culture of the diplococcus from these organs, and the reproduction of the disease by intravenous inoculation into animals.

Our most recent investigations have been concerned with the possibility of throwing lights upon any part that the rheumatic infection may take in producing abdominal affections.

For more than ten years we have recognised a mucous colitis in rabbits as a result of this infection, and also intussusception. We have also isolated the diplococcus from the bile of rabbits infected intravenously with the diplococcus and have observed the occurrence of a considerable gallstone.

In 1911, however, we produced appendicitis by intravenous inoculation of the diplococcus isolated from the knee-joint of a boy suffering from a moderate attack of acute rheumatism. This occurred in young rabbits of six weeks, four out of twenty inoculated suffering from appendicitis, nineteen from polyarthritis, and one from pericarditis.

In 1912 we isolated a strepto-diplococcus from a child suffering from follicular tonsillitis and acute appendicitis. It was obtained both from the tonsils and the exudation of the inflamed appendix, and with it we produced appendicitis in young rabbits, and also polyarthritis, and in one instance endocarditis.

These results are not sufficiently numerous as yet to allow us to say more than that they are suggestive of the possible existence of a rheumatic appendicitis, which, since Kelynack's original paper some twenty years ago, has been held by various physicians to occur in man.

They also, however, appear to us to throw fresh light upon the pathology of that most important disease, appendicitis, and direct attention to the probable importance of a blood infection, as opposed to a local cause as the exciting factor. The writings of Kretz and other German observers since Kelynack first suggested the connection have directed attention to the relation of appendicitis to tonsillitis, and these investigations seem to fill in a link in the chain of evidence.

During the last six months our investigations of the morbid anatomy of the human diseased appendix when compared with that of the animal entirely support the view that the process arises by a blood infection.

We illustrate these points also by our specimens and drawings.

The fact that intravenous inoculation of the diplococcus may produce a solitary ulcer in the appendix is of interest also in its bearing upon the pathology of solitary ulcer occurring at any point in the intestinal canal in man, and since arthrites associated with abdominal symptoms may result from intravenous inoculation of the diplococcus it does not necessarily follow that the arthrite is the outcome of auto-intoxication from the bowel.

In conclusion we would venture to emphasise that these investigations upon acute rheumatism encourage us to direct great attention to the possibilities of the prevention of this disease, which, among other injuries it does to the human frame, is the first cause of organic heart disease in childhood.

ON THE TREATMENT OF SKIN AFFECTIONS BY SOLID CARBON DIOXIDE. (*a*)

By J. L. BUNCH, M.D., D.Sc., M.R.C.P., B.S.

Physician for Diseases of the Skin to the Queen's Hospital for Children, London; Physician to the Skin Hospital, Leicester Square; Membre Correspondant de la Société Française de Dermatologie.

At the meeting of the British Medical Association last year I read a paper on two thousand nævi, which I had treated by the application of solid carbon dioxide, quite aside from other methods of treatment, and I have treated a large number of nævi since. Apart from the rapidity and comparative painlessness of the method, one great advantage is the ability to cut or mould the stick of snow to any shape, so that a nævus of reasonable size, whatever its irregularity of outline, can be accurately frozen in its whole surface at a single application, a result which cannot, of course, be obtained by such methods as electrolysis, the cautery, or radium. A single application is usually sufficient to cure a stellate nævus or small angioma, if care is taken to shape the stick of snow accurately to fit, including a margin of healthy skin of one to two millimetres all round, and exercising firm pressure on the skin. Pigmentary nævi, especially if they are hairy, usually need more than one application, and it is much better to do too little at one sitting than too much, as I have seen quite unsightly scars, sometimes keloidal, produced by a too prolonged application of the snow to moles, the scar being often to all intents and purposes as disfiguring as the original skin lesion. When the hairs on the mole are coarse, I prefer to remove them by electrolysis, and the subsequent return of any pigment in the nævus can be obviated by giving radium applications while the skin is healing up from the carbon snow treatment.

In the case of nævo-fibromata and nævo-lipomata, where excision is objected to, a great deal of the disfigurement can be removed by treating the purplish skin areas with carbon dioxide until the surface is white, and then inserting some electrolysis needles, insulated with shellac to within half an inch, or an inch, of the point, right into the swelling, and repeating this procedure if necessary at different points of the swelling.

Port-wine stains (*taches de feu*) are undoubtedly the most unsatisfactory kind of nævus to treat by any method, and one sees cases, the colour of which is so intense, and which involve the deeper structures to such an extent that no method at present at our disposal is capable of doing more than diminish the disfigurement without running the danger of unsightly scarring. The most difficult cases to treat are those in which the corium and underlying structures are deeply involved and which have a nodular, irregular surface, with warty projections, and for these there is no really efficient method of treatment. But for a moderate-sized red, superficial port-wine stain in a child, when the purple tint is absent, or but slightly marked, applications of solid carbon dioxide at intervals of a fortnight or three weeks will often give excellent results. In adults, too, I have been quite successful when the port-wine stain was fairly localised, and carbon snow was employed in conjunction with a plaque of radium of one million activity.

Cases of *linear nævus* and *nævus verrucosus* also do very well when treated with solid carbon dioxide; but for verrucose nævi, where there is much thickening and warty growth, very firm pressure must be made and the pressure maintained for about sixty seconds or even more.

In all these cases I consider that the stick or crayon of solid carbon dioxide is far preferable to any other method of applying carbon snow.

When a much greater intensity of cold is required than that obtainable with solid carbon dioxide, or a large surface has to be covered in the minimum of time, it is often convenient to use liquid air. The temperature of solid carbon dioxide is only −78.2° C., while that of liquid air is −190° C., so that with the latter reagent the freezing is much more rapid.

The application to the skin of either liquid air or solid carbon dioxide for a few seconds causes a preliminary freezing of the tissues, followed by a well-marked inflammatory reaction, which, according to its intensity, may result only in thrombosis of the superficial vessels and fibroplastic sclerosis of the epidermal tissues, or any stage between this and complete necrosis. The action differs from that of the cautery or a caustic in that all the tissue elements frozen are not indiscriminately destroyed, and the resulting scarring is, owing to the gradual transformation

---

(*a*) Abstract of Paper read at the Annual Meeting of the British Medical Association at Brighton, July, 1913.

of the tissue elements into fine fibrous tissue, much more supple and inconspicuous than when these other methods of treatment are employed. Moreover, the exact amount of inflammatory reaction can be controlled, both as regards extent and depth.

Rodent ulcer is perhaps the skin disease, other than nævi, in which solid carbon dioxide gives the best results. Small rodent ulcers on the face can frequently be cured by a single application of forty seconds with firm pressure, and, if care has been taken to go well outside the raised edge of the ulcer, no further application may be necessary, and no recurrence occur. But if the spreading edge be not destroyed in its entirety, and a small portion of the edge be left, this usually gives rise to a recurrence in a few weeks or months. The recurrence is, however, considerably smaller than the original growth, and one or two more applications will complete the cure. When the original ulcer is of the size of half-a-crown, or larger, I usually give an initial application of forty seconds, followed by a second application of thirty seconds at the end of a week. The ulcer is then allowed to heal up under boracic acid dressings, which takes about three weeks, and it is then carefully examined to see whether any traces of the edge still require further treatment. The results thus obtained are, in my opinion, equal to, if not superior to, any result got with X-rays, ionisation or radium, and of course with greater rapidity and less expense.

Lupus erythematosus of the discoid or nodular variety reacts very well indeed to treatment with solid carbon dioxide, and fifteen seconds' applications are usually sufficient. When the patches are old-standing ones, and there is a great deal of thickening, somewhat longer exposures are necessary. A small superficial ulcer results from the freezing, which heals up in a week or two, and the newly-formed tissue is usually sound and supple, with very little appreciable scarring.

I have used this reagent in a number of cases of *Lupus vulgaris*, and, although many of the cases can be cured by it, the scarring is rather excessive if no recurrence is to take place. In small patches the isolated nodules can be more satisfactorily destroyed one by one by other means, and large patches are better treated by scraping thoroughly and immediately X-raying. If, in addition, a successful Thiersch-grafting be performed, the scar will be much better than that got with carbon snow in a really severe case. The latter is, however, preferable to X-raying without scraping, on account of the telangiectases which repeated X-raying is so likely to produce.

Localised patches of *chronic psoriasis, chronic eczema* and *Lichen planus* respond extremely well to freezing. The irritation caused by the lesions of the two latter diseases ceases immediately after the snow has been applied, the patches heal up with healthy skin after a single application as a rule, and even the soreness caused for a time by the snow is far preferable to the itching previously experienced.

Corns and warts lend themselves very well to cure by freezing, but they are such bad conductors that very firm pressure has to be made and the exposure increased to a minute or more. The period of freezing can, however, be appreciably diminished by first shaving down the wart until it is nearly flush with the skin and then applying the stick of solid carbon snow. Corns on the sole of the foot, after adequate freezing, are apt to be rather excessively tender, owing to the resistance of the underlying plantar fascia, and the pressure which it causes on the inflammatory swelling produced by the freezing, but this can be diminished or prevented by injecting a few drops of novocaine soluton.

Chronic ulcers of the leg, when the edge is markedly thickened and indurated, may often be made to take on healthy healing action by being frozen lightly for about twenty seconds. The object here is not of course, as in rodent ulcer, to destroy a malignant growth, but to induce the formation of healthy granulations in place of the indolent ulcer base, which shows little or no tendency to form fresh, actively growing tissue. The actual edge of the ulcer, if much indurated, should have a longer exposure to the snow.

SOME RHENISH SURGERY.

By WILLIAM DOOLIN, M.B., F.R.C.S.I.
University College, Dublin.

For the busy practitioner at home, who wishes to take a short respite from the cares and worries of modern practice, one can recommend no more pleasant no more profitable trip than a "busman's holiday" down the Rhine, combining pleasure and instruction alike

As the University was changed from Cologne to Bonn by the Electors, there is now no big teaching clinic for students in Cologne, but there exists a well-known centre for German post-graduate workers, the Kölner Akademie für Praktische Aerzte, under the direction of Prof. Bardenheur.

Bonn.

The surgical clinic is under the direction of Geheimrat Professor Garré, who, on succeeding August Bier, in 1907, on the latter's call to Berlin (*vice* von Bergmann, deceased), had the whole structure rebuilt, so that as it stands to-day it is a model modern hospital.

I spent two very interesting mornings with Prof. Garré. As is usual in the big German clinics, all clinical instruction is given in the operating theatre, or Hörsaal. The patient's bed is wheeled into the arena, round which a series of seats, in ascending tiers, is arranged in horse-shoe fashion, so as to accommodate about 100 students comfortably. The assistant in whose ward ("station") the patient happens to be, reads out the case-history. The professor then has two or more students called down to the bedside to examine the case, and proceeds to "quiz" them on the diagnosis, treatment, etc., the other students taking notes the meanwhile. In this manner four or five cases are got through in an hour. Ward instruction is not the practice in German clinics, as the classes are too large and unwieldy. (I have seen as many as 200 students at a lecture of Bier's in Berlin.) After lecture, the cases are operated upon.

Garré's aseptic *technique* leaves little to be desired. Hands are washed for ten minutes with nail-brush and sterilised soap in running water, then for five minutes in alcohol sublimate, and finally rinsed in sterilised cold water and dried with a sterilised towel. A sterilised "mantel" with short sleeves is then drawn on over a rubber apron and fixed by a sister. The forearms are covered with sterilised, tight-fitting manchettes, reaching from the wrist to above the elbow. No gloves are used; caps are worn, but not masks. The operation area is painted twice with strong iodine solution. The patient is well covered during the operation. Silk is used almost exclusively as suture and ligature material; Garré uses a very fine, strong silk (.0000), which he gets from Piersol, of London. Catgut is used only exceptionally for muscle suturing in big kidney operations. Professor Garré is particularly interested in kidney work, and has published a standard text-book on the subject, amongst a host of other works. The pathological museum contains some very fine specimens of surgical kidney, hydronephrosis, and kidney abnormalities, all preserved by the Kaiserling-Pick method. The original colours are particularly well preserved.

I watched Garré do several operations. The first patient was a man, æt. 34, suffering from a large cyst—adenomatous goître, with superimposed symptoms of Basedow's syndrome. (By the way, in most of the German clinics I have visited, with the solitary exception of Prof. Bier's, one hears only German names. Graves' disease is known as "die Basedowsche Krankheit," Colles's fracture is called "typische radiusfraktur," and Lane's kink has not been heard of, except by Payr, of Leipzig! Garré believes that exophthalmic goître is a dysthyroidism rather than a hyperthyroidism, as, indeed, is the prevalent consensus of opinion in Germany.

Garré has devised his own operation for these goître cases. He always operates under local anæsthesia. After making the usual collar incision, he ligates the superior and inferior thyroid arteries of one side. He then dissects off the anterior wall of the capsule by blunt dissection and removes it. The gland is then enucleated in the ordinary way, and the remains of the posterior portion of the capsule plicated by interrupted silk sutures. A drainage tube is left in for 24 hours. The skin wound is closed with fine interrupted silk sutures. He is a painstaking, conscientious operator and a very neat dissector. I also watched his first assistant (Prof. Machol) do another goître operation in the same way.

The second morning I watched a very interesting operation. A young girl of 18, who had been operated on elsewhere four months previously for acute appendicular abscess, came to the clinic with a fæcal fistula. The appendix had not been discovered at the first operation. Under ether-drop narcosis (administered by a lady assistant), Garré dissected out the fistula right up to the cæcum. It was not continuous with the lumen of the appendix, which was obliterated at its origin from the cæcum. He closed up the sinus and removed the appendix. In doing this latter, he did not invaginate the stump as we do, but simply cut it off almost flush with the cæcum, and put in a double row of interrupted silk Lembert sutures. The closing of the abdominal wound was left to an assistant, which method, I think, is a mistake, in these cases at least.

The orthopædic and surgical polyclinic in this clinic was the last word in efficiency.

A very interesting feature of the Bonn University clinic was the private department attached for patients who did not desire to go into the public wards, and yet who were not in a position to pay the big fees demanded at the private institutions in the town. The ordinary German ward patient is paid for by his Krankenkasse, or sickness insurance society. In Bonn the fee is two marks per diem. In Berlin it is 4½ marks per diem. At the Garré clinic a number of well-appointed bedrooms are set aside for private patients of inadequate means. These are divided into two classes: the first class pay ten marks, the second pay six marks per week. No fee is accepted for the operation. We inspected some of these rooms, and I have seen worse rooms at home at 30s. and 40s. per week. Prof. Garré also has a large private hospital—the Johannis Hospital, in the vicinity of the University Klinik.

Garré is of a very quiet personality, broad-minded and well acquainted with English and American surgical literature. He lectures in a quiet, conversational voice, and is not nearly so dogmatic as less well informed men whom I have met, both at home and abroad. He was exceedingly courteous, and put every opportunity in my way of seeing all I could in a short space of time.

FRANKFURT.

The surgical clinic at Frankfurt-am-Main is in charge of Prof. Rehn, who is best known, perhaps, for his adventurous researches in cardiac surgery. In 1892 Rehn was the first surgeon successfully to suture a bad stab-wound in the heart. Since then he has done many cases. What his pioneer efforts have led to may be shown by the fact that up to two years ago there were 127 successful cases recorded in Germany alone.

In none of the many German clinics that I have visited have I ever been so struck with the spirit of geniality and "bonhomie" as in Rehn's clinic. One feels oneself indeed in a "Heilanstalt" in the truest sense of the word.

Rehn possesses 240 surgical beds in his hospital, and we saw some highly interesting work. The first morning we were present we watched him carry out Förster's operation—section of the posterior nerve roots for gastric crisis in tabes. His *technique* is very good; he works fast and is ably assisted. In fact, watching him that morning, the truth of Moynihan's adage was well brought home to me: "Modern surgery is the work of a team, and not of one man." I have seldom seen such perfect accord between an operator and his assistants during an operation.

The preparations for the operation were very interesting. The operators stood before big nickel bowls, into each of which a sister poured about half a pint of liquid soap; warm water was then run in from a tap, and a really prodigious lather ensued. The hands are well washed in this for eight minutes with a nailbrush, then rinsed in sterilised water. Next, the hands and arms are scrubbed in absolute alcohol with soft pads of lint for five minutes. As the quantity of alcohol used daily is very large, Rehn has an ingenious device by which, after every washing, the used alcohol is carried off and redistilled for the next morning's use. In this way a great economy is effected. The actual amount used daily is measured by a controller on the main tap. The hands and arms are then dried, and dry thin rubber gloves are put on with the usual cap and mask. Iodine is used on the skin, except in laparotomies; in these cases Rehn is of opinion that iodine leads to post-operative peritoneal adhesions, and the abdomen is well scrubbed with large balls of lint soaked in equal parts of turpentine and benzene. Silk is used throughout; catgut only very rarely, as at Bonn, for muscle suturing.

I attended the operating theatre on two successive mornings. On each Prof. Rehn himself performed the first operation, leaving the subsequent simpler ones to his assistants. The first morning, he carried out a section of the 7th, 8th, and 9th dorsal nerve-roots for very severe tabetic gastric crises in a man of 54 years. The entire operation took 41 minutes. Rehn is different from other Continental operators whom I have seen, in that he always sutures his skin-wounds himself, and does not leave this portion of the operation to an assistant. He stitches rapidly and with his left hand. The patient lay full on his face. The anæsthetic was administered admirably, considering the difficult position, through a Roth-Dräger apparatus by his military assistant, Stabsarzt Dr. Bettke. Narcosis was induced with chloroform, and continued with ether. Considering the amount of divided tissues, there was surprisingly little hæmorrhage. The dura was closed with fine silk, muscles sewn together with iodised catgut, and skin sutured with very fine interrupted sutures.

The following morning I again watched him perform a thymectomy on a child nine months old. A three-inch incision was made upwards and outwards from the left sterno-clavicular articulation, the capsule of the gland opened, and the gland gently extracted. There was some slight difficulty at the last moment owing to strong adhesions between gland, capsule and pericardium. The entire operation took 17 minutes. The anæsthetic was pure ether, again with the Roth-Dräger apparatus. During both these operations a special nurse was told off to observe the pulse continuously, and warn the operator of any serious fall or rise.

More interesting, however, than the actual cases operated upon, were several special cases that Prof. Rehn himself showed us in his wards. Two were pericardiotomies for gross suppurative exudations into the pericardial sac. Rehn is of opinion that most cases of serous pericardial effusion go down from severe pressure on the heart. He is fortified in this opinion by the fact that during a recent six weeks' absence four patients died without operation in the medical clinic, who would otherwise have been operated upon and probably saved. The two patients I saw were young male subjects, one 12 years and the other 18. Both had suffered from severe streptococcal pericarditis: the older subject had been found, stabbed, in a wood outside the town; both pericardium and lungs had been pierced, but the heart had escaped. A very severe pyopneumo-thorax had ensued. Both patients, when I saw them, looked on the road to recovery. The younger had been operated upon two days before my visit, the stab-wound case two months before.

Another highly interesting case that was shown us was that of a little girl, aged 14. Two years ago Rehn had operated upon her for ectopia vesicæ in the following manner: The ileum had been divided across and the proximal end anastomosed (end to side) with the transverse colon. The cæcal portion had been closed. The ascending colon had likewise been cut across and each end closed. Thus the cæcum, part of the ileum, and part of the ascending colon now formed a fully closed sac. At the same sitting an appendicostomy was performed, and a permanent catheter left in its lumen. This artificial bladder was now washed out several times daily for three weeks with saline and hydrogen-peroxide solutions. At the end of three weeks the trigone of the bladder, with ureters attached, was implanted into the cæcum. Uninterrupted recovery ensued, proper retention of urine, and no kidney infection. The child had now come back to the clinic complaining of pains in the new bladder region. On X-ray examination, seven urinary calculi were discovered. Unhappily we could not wait to see this highly interesting case operated upon.

Attached to the surgical clinic is the well-known Institut für Experimentelle Chirurgie, under the charge of one of Prof. Rehn's assistants, Dr. Klose, who has published some highly interesting original work on the surgical aspects of Basedow's disease, and of thymus affections in both children and adults.

Heidelberg.

At Heidelberg we visited the clinic of Prof. Wilms, who is best known to us, perhaps, by his work on the cæcum mobile. We saw him perform several very interesting operations. The first was on an old man of 67, who was suspected to be suffering from gastric cancer, supervening on a chronic ulcer. The anæsthetic was ether, administered through the ever-present Roth-Dräger apparatus, by a young girl, recently qualified and serving as a Voluntär-Assistintin. Wilms decided not to do a gastrectomy, on account of the age and feeble frame of the patient, but did a posterior gastro-enterostomy instead, using a rather long loop. He stitched with a triple line of interrupted silk sutures, which were tied at an unusually rapid rate by his first assistant. The whole operation took 19 minutes.

The second case was a very interesting one. A boy, aged 11 years, was suffering from bilateral dislocation and fixation of the hip-joints, due to a severe suppurative arthritis two years before. On this case Wilms carried out a very ingenious operation of his own device. Using the usual Lagenbeck incision, he completely loosened and separated all the adhesions between the femur and ilium. The head of the femur had been completely absorbed, and the acetabulum was so shallow that a proper *restitutio ad integrum* was out of the question. He thereupon loosened a layer of periosteum and bone, as a kind of overhanging shelf, from the dorsum ilii just above the acetabulum, and let it hang directly over the remains of the head of the femur. Between these two structures he transplanted a large, square piece of fat taken from the gluteal region. The skin-wound was then sutured without drainage, and the leg put up in plaster of Paris in the extended, abducted and everted position. After the operation he showed us X-ray pictures of two other similar cases on which he had carried out an identical procedure some years before, and in which a pseudarthrosis had formed, with excellent functional result. In the present case, he purposed operating on the other hip at an interval of two to six months hence. The operation was carried out rapidly and decisively, with no hesitation, and was highly ingenious.

We watched him do yet a third case—a prostatectomy, under local anæsthesia. The anæsthesia was faultless, and the patient an old man of over 70. Wilms follows neither the Freyer nor the Young method, but has devised a rapid and very effective perineal enucleation of his own. The patient being placed in the lithotomy position, a cut is made radially from the anus to the left ischial tuberosity. With his gloved finger as guide, he plunges a knife into the under part of the prostatic capsule, and rapidly enucleates the gland, which is held steady by means of a Young's retractor, passed per urethram, and held by an assistant. On account of its hardness, he sent the gland to be examined for possible carcinoma. There was practically no hæmorrhage. A large drainage tube was inserted, which was to be left in till the sixth day. The whole operation took only three and a half minutes, and appealed to us very much for its simplicity, rapidity and excellent drainage. He told us he had done over 150 of these cases by this method, and found it, in his hands, superior to the methods of Young and Freyer, both of which he had tried. He had no recurrence, and as he always operated under local anæsthesia, had no unpleasant post-operative lung complications. Sepsis rarely caused him any trouble, as the drainage was excellent. He further stated that William Mayo, who had visited the clinic two years before, had adopted this method, and had since written to him to express his complete satisfaction with the results he had obtained.

With this account I close. I saw many other operations and operators, but have chosen what appeared the most interesting points in a highly interesting tour, and have set them forth, somewhat untidily and unconnectedly perhaps, in the hope that it may prompt some of our fellow Irish surgeons, and particularly the younger ones, to spend even as profitable and as pleasant a visit with our German colleagues.

OPERATING THEATRES.

MIDDLESEX HOSPITAL.

Intestinal Obstruction from Ileal Kink Due to Adhesions.—Mr. Sampson Handley operated on a married woman, æt. 28, who had been admitted in the evening with pain over the abdomen, especially over the lower part, and sickness since the morning. Temperature was 98.6° and pulse 116. She gave a history of salpingo-oöphoritis two years ago, and was operated on by another surgeon, when both the ovaries, tubes and the uterus were removed. She was much better after the operation, but since last six months she complained of getting large in the abdomen. Examination showed the abdomen to be very tender, distended and slightly rigid. She was operated on the same night. The abdomen was opened under open ether anæsthesia by a median subumbilical incision through the old scar. Several adhesions to the pelvis were found. The appendix was adherent, and there was a distinct ileal kink present near the cæcum. The fibrous bands were divided, appendix removed, normal saline put in the abdomen, and the wound closed by figure-of-eight and through-and-through sutures. Patient passed a fair night after the operation, but there was hardly any result with the rectal tube and a good deal of distension was present. One-fiftieth grain of eserin salicyl was given subcutaneously. There was a fair result with the rectal tube the next morning, and moreover the patient passed flatus naturally. The pain disappeared altogether on the third day. Temperature went up slightly after the operation, but came down to normal on the third day and kept such during the whole convalescence. Since then the patient made an uneventful recovery, and was discharged quite well.

Intestinal Obstruction and Paresis of Part of Small Intestine.—The same surgeon operated on a married woman, æt. 53, who had been admitted in the morning with all the symptoms of acute intestinal obstruction. The patient gave a history of a former operation in 1908 by another surgeon, who did a subtotal hysterectomy for fibroid and rigid salpingo-oöphorectomy. She felt quite well after the operation till last few months, when she had been getting colicky pain off and on, which used to pass off shortly. She was getting constipated gradually. For the last three weeks before she came in there had been no proper opening of the bowel, and she was getting definitely larger in the abdomen. There was not much pain and very little sickness. She very rarely passed flatus these days. But since three days the abdomen had become more distended and the pain increased. She had been vomiting greenish fluid with an offensive odour. Temperature was subnormal and pulse 124.

Examination showed the abdomen enormously distended, very rigid and tender; there was visible peristalsis present in the upper part. She vomited twice in that day. A stomach tube was passed, and a fair amount of the liquid stuff was brought out. The same evening she was operated on under general (open) ether anæsthesia. The abdomen was opened in the middle line by an incision about 5½ inches in length. There were great fibrous adhesions between the coils of intestines, the omentum and the peritoneum. These were thoroughly freed. The intestines were brought out, and it was found that the whole of the small intestine was enormously distended. There was partial paralysis of the lower part of the jejunum, but definite peristalsis was felt in the upper part. No definite constriction in the intestinal wall was found. With two punctures, one on the right and the other on the left, a large amount of green, liquid, fæcal matter was let out, and the openings were closed by purse-string sutures. Then a lateral anastomosis was made between the ileum and the cæcum. All this time the intestines were kept moist with warm saline. Then normal saline was poured into the abdominal cavity, which was then closed by figure-of-eight and through-and-though sutures. Patient's condition was very bad at the end of the operation, and she was ordered to have pituitary extract and eserin subcutaneously and high rectal tube for saline. Her condition still got worse and the pulse was very feeble. Three pints of normal saline were given intravenously, the legs were bandaged, the foot of the bed raised, and she had also subcutaneous saline under both breasts. By these means the patient got over the shock, though she passed a most anxious night. The next morning the patient looked much better. Bowels opened twice, and the same sort of green stuff came out. There was good result with the rectal tube—especially after eserin. The temperature was 96.9° and pulse 112. Bowels have been kept open regularly ever since, and there were healthy formed stools since the third day. Temperature went up to 100° and the pulse came down to 98 on the third day. The patient improved and felt better every day ever since. Stitches were taken out on the tenth day. The temperature and pulse were nearly normal. She has been improving steadily ever since without any interruption, but for a mammary abscess due to the infection of the saline with B. coli. She is getting up now and is probably going out within a couple of days.

TRANSACTIONS OF SOCIETIES.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The thirty-second annual session of this society was opened at the West London Hospital on Friday last, October 3rd, when

Dr. F. S. Palmer was inducted as the new President.

The first duty he had the pleasure of performing was the presentation of the Keetley Memorial Medal to his predecessor in office, and a very hearty vote of thanks was accorded to Dr. G. P. Shuter, the retiring President, for the time and trouble he had devoted to the interests of the Society, and for the able way in which he had acted as its chairman. It was hoped this replica of the original medal inscribed with Dr. Shuter's name and year of office would be a pleasant memento to him, while it served to perpetuate the memory of the late Mr. C. R. B. Keetley, founder of the Society.

Dr. F. S. Palmer then delivered his presidential address, entitled

A GENERAL VIEW OF MALINGERING,

which will be found in another column under the heading "Original Papers," page 393.

Prior to the formal business of the evening cases were shown by Mr. N. Bishop Harman, and the meeting closed with a vote of thanks to Dr. F. S. Palmer for his interesting and opportune address.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 4th, 1913.

FURUNCULOSIS.

The treatment of boils and furunculosis is well known at present through the researches of Prof. Mauté, who developed his method in the *Journal des Praticiens.*

Taking at first the negative side of the question, M. Mauté eliminates from the treatment all that was hitherto regarded as classical. He is entirely opposed, for instance, to the application of tincture of iodine, or to a solution of iodine and acetone; these applications have no effect on the progress of the infection. Surgical treatment is also useless; opening the tumour and removing its contents is absurd, the incision of the boil is painful and leaves an ugly cicatrix behind. The knife should be reserved for anthrax. Baths, however antiseptic, should not be prescribed before the second week after the eruption has disappeared.

M. Mauté's method of treatment is as follows:—Apply to each boil a small piece of compressed cotton-wool (*cataplasme*) the exact size of the tumour and maintain in position by narrow strips of adhesive oxide of zinc plaster. The part should not be enveloped in layers of cotton wool, as in the case of ordinary wounds. As soon as suppuration is ended all dressing is removed If the boil remains hard and inflamed, a little collargol ointment may be applied—

Collargol, 1 dr.
Vaseline, 1 oz.

Where a group of boils exist, each one should be treated separately; no large occlusive dressings should be applied To disinfect the surrounding skin and thus avoid re-inoculation, lotions of spirit of camphor may be used, after which the region is powdered with

Talc powder, 4 oz.
Peroxide of zinc, 1 oz.

The general treatment consists in inoculations of antistaphylococcic vaccine. The vaccine employed by M. Mauté is prepared with the microbe of the patient (auto-vaccine). Each cubic centimetre contains 1,000 millions of microbes. Where the furunculosis is in the acute stage, an injection of a quarter of a c.c. (250 millions) is made every four days; after the fourth injection the dose is increased to half c.c. (500 millions), given once a week, or seven or eight injections in all.

In 80 per cent. of the cases the boils will not return after the first four injections; in 15 per cent. it may be necessary to prolong the injections; in the remaining 5 per cent. the treatment fails, but these cases are generally due to diabetic intoxication. Laxatives are useful throughout the treatment:—

Sulphate of soda,
Rochelle salt,
Bicarbonate of soda, aa 1 oz.

Two teaspoonfuls each morning in a glass of hot water.

Fissure of the Anus.

This painful affection is rapidly cured by the application of a three per cent. solution of blue of methylene after washing the parts with oxygen water. The same treatment is efficacious in sore nipples and pruritus of the vulva.

GERMANY.

Berlin, Oct. 4th, 1913.

At the Wissenschaftlicher Verein, Stettin, Hr. Haeckel demonstrated a

Series of Cases of Calculus.

The first was that of a calculus of unusual size removed from the ureter of a woman, æt. 30. The pelvis of the kidney was first reached through an oblique incision in the loins; it was then opened, but nothing but fine concretions and fat were found. The ureter was then opened by an incision along the upper surface. The calculus was situated under the linea innominata, and it struck the operator as curious that there was no dilatation of the ureter above the obstruction. At first the intention was to push up the stone so that it could be removed through the opening thus made, but this mode of procedure had to be given up, as the blood vessels supplying the parts would have suffered from the manipulations. An incision had then to be made above the stone, and through this it was removed. Suture of the ureter and of the wound, except for two drains. Uninterrupted recovery. It was absolutely necessary to preserve the pelvis of the kidney, as Röntgen examination of the other kidney showed a large calculus there which would have to be removed on a later occasion. The calculus was 3.5 c.m. in length and 1.2 in diameter.

The second case was one of vesical calculus, in which the incrustations had formed round a centre of paraffin. The patient had suffered a great deal from cystitis. There was great difficulty in getting the calculus into view, as the body was so easily moved through the fluid contents of the bladder. Sectio alta was performed and recovery was uninterrupted. The calculus, the dimensions of which were 2.4, 1.7, 1.2 c.m., was translucent; it had a thin coating of lime, and consisted of a pencil of paraffin doubled up. The patient, who was a sailor, admitted, after some persuasion, that a pencil of paraffin, the thickness of a lead pencil, had been passed into his urethra in a brothel, that the pencil had broken off, leaving a part in the bladder. The paraffin appeared to have very quickly set up a good deal of pain in the bladder. The speaker thought it possible that more of the cases of urostealith met with might be set up in the same way.

The third case was one of urethral calculus occurring in an unmarried woman, æt. 21. She had sought medical advice on account of great pain and inconence of urine. A little more than a c.m. from the orifice of the urethra a stone was encountered; it could also be plainly felt from the vagina. It was easily removed through an incision in the anterior vaginal wall. Continence returned after removal of the calculus. The speaker pointed out the great rarity of urethral calculi in women. According to the last edition of Veit's handbook, only ten cases of the kind has been recorded. The stone did not lie in a diverticulum, but in the mid-passage of the urethra.

Hr. Kalb showed two patients for whom foreign bodies had been removed from the gastro-intestinal canal. The first case was that of a psychopath who had had laparotomy performed three times on account of spoon-handles that he had swallowed, and which had stuck at the pylorus. The other patient was a child who had swallowed a pin, which had pinned the jejuno-duodenal flexure. The parts were separated and the pin removed.

At the Unteressässischer Aerztverein, Hr. Weill showed a case of

Pulsating Exophthalmos.

The case was that of a youth, æt. 17, who two months before had had a fall from a bicycle, which resulted in unconsciousness and vomiting. Consciousness returned in 48 hours. The eyelids were swollen, and he remarked a disagreeable rushing noise in the left side of the head. There were now exophthalmos, dilatation of the veins, which were felt to pulsate synchronously with the radial pulse. Vision was good. Accommodation paralysed. In the fundus oculi there was enormous fulness of the veins, nothing abnormal in the papilla. When the left carotid was compressed the pulsation ceased, and the patient felt relieved. The explanation of the condition was believed to be fracture of the base of the skull with rupture of the internal carotid artery with communication with the sinus cavernosus. The pulse wave was communicated to the whole eye through the superior ophthalmic vein. Treatment consisted in ligature of the carotid, which, however, was not free from danger, and, moreover, it did not always lead to the desired result. The speaker had had an apparatus constructed that set up in a simple manner slight compression of the cervical part of the carotid.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Edinburgh Post-graduate Courses.

The post-graduate courses of 1913, which have just ended, have been more successful in point of the numbers attending them than in any previous year. They were participated in by 111 graduates, as compared with 99 in 1912. Half of the entrants, it is said, came from within our own shores and half from the Colonies and the United States. Concomitantly with the rising number of students, the number of teachers and the number of classes have also increased. This year no less than 79 teachers gave instruction. Of late years the post-graduate courses have developed along a line somewhat different from that intended by the originators seven or eight years ago. In the first instance, the views of men who wished merely to spend a part of their holiday in getting a general brush-up all round were especially kept in view, but experience shows that this class tends to diminish in favour of men who come desirous of devoting several weeks of hard work at some special subject. At first these were catered for in August in a special course in medicine, and in September in a special course in surgery, reserving the bulk of the September course for general subjects. Gradually, however, the general course is being, as it were, encroached on by specially arranged courses. Thus, for the past two years a special course on diseases of children has been arranged in July, in which not only the medical and surgical aspects of pædiatrics are considered, but eye diseases, mental defects, otology, fevers and skin diseases, as they occur in childhood, are dealt with by specialists. Again, courses on laryngology and the allied subjects, a course on genito-urinary surgery, and courses on operative surgery have been organised; and it is hoped that courses on gynæcology may be arranged for, while probably some of the special branches of internal medicine will come in for more notice. It is really a matter for congratulation that the Edinburgh post-graduate courses show so much vitality, and those who taught in them this year are more than ever pleased and surprised at the hard and strenuous work done by the graduates.

On September 1st the Executive Committee gave a reception in the University Union to the graduates attending the course, in order that they might have an opportunity of becoming acquainted with the teachers. The guests were received by Prof. Harvey Littlejohn, Dr. J. W. Ballantyne, and Dr. J. D. Comrie. A feature of the September course was the series of special afternoon lectures, among the lecturers being Dr. Byrom Bramwell, Prof. Littlejohn, Sir Halliday Croom, Mr. Stiles, Dr. Allan Jamieson, Dr. Berry Hart, Dr. Woods Hutchinson, and others.

GLASGOW.

Wassermann Test in Relation to Public Health.

The Glasgow Corporation resolved some months ago to place the Wassermann reaction on the same footing as the test for typhoid fever, tuberculosis, and diphtheria, and to offer facilities to practitioners for having the test done by the health authorities. Provision has now been made in the Public Health laboratory for carrying out the test. The name of the patient is not asked, but particulars as to age, sex, occupation, leading symptom, and the ward of the city in which the patient lives are required. It is not intended that the reaction should be done in obvious cases of syphilis, but only in obscure cases. A fee of 2s. 6d. is paid for every sample of blood sent in for examination, and the requisite apparatus for collecting blood is supplied gratis. Unless we are mistaken, Glasgow is one of the first municipalities to afford such facilities, and in view of the fact that a definite crusade against syphilis cannot be much longer postponed, her action deserves all praise, and ought to be imitated elsewhere.

Clinical Research Laboratory at Glasgow Victoria Infirmary.

A new clinical research laboratory, the gift of Mr. William Robertson, was formally opened on October 2nd by Lord Rowallan, Chairman of Directors. Dr. Mackintosh, Superintendent of the Glasgow Western Infirmary, in describing the buildings, said they were second to none in the United Kingdom. The laboratory is a two-storey building, and on the first floor are rooms for preparing culture media, and a lecture room. Above, there is a large clinical laboratory, with chemical laboratory adjoining. There are also on this floor special weighing rooms, vaccine rooms, incubator rooms, and sterilising rooms.

Munificent Bequest to Glasgow University.

The late Dr. Tennent made a will about two months before his death by which he has bequeathed £25,000 to the governing body of Glasgow University, to be applied for such object or objects in connection with the Faculty of Medicine as his trustees may determine, and the remainder of his estate to the Western Infirmary, the Royal Infirmary, the Victoria Infirmary, and the Royal Hospital for Sick Children, Glasgow.

The Chadwick Trust Lectures.

The first lectures in Scotland under the provisions of the late Sir Edwin Chadwick's trust for diffusing knowledge on the subject of the health of nations were delivered in Glasgow last week. At the opening lecture, on October 1st, Principal Sir Donald Macalister presided. The lecturer was Mr. W. E. Riley, superintending architect to the London County Council. The Chairman referred to Chadwick as having been a demonstrator as well as an advocate of great measures of social improvement. The lecturer, in the course of his lecture, which was on London housing schemes, traced the causes of overbuilding, and described some of the extensive operations which the London County Council had carried out. In concluding, he discussed the largest clearance ever embarked on under the Public Health Act of 1890. This was the scheme dealing with Tabard Street and Grotto Place, Bermondsey and Southwark. The area had a total extent of 17 acres, the number of persons of the working class affected being 4,552. It had been decided that the central portion of the area, or about 5 acres, should be laid out as a public open space, and that the requisite rehousing accommodation should be provided in five-storey, balcony, block dwellings, overlooking the open space, with as many cottages as could conveniently be erected. The total net cost of the scheme was estimated at £389,000.

The Workmen's Compensation Act and Uncertified Deaths.

A case of uncertified death at Linlithgow, which occurred about two months ago, has led to some rather unusual proceedings, illustrating the working of the Workmen's Compensation Act. A vanman and salesman sustained injuries, it was alleged, through falling or being thrown from his van or lorry, and, he having died, his widow claimed compensation under the Act from his employers, on the ground that the accident arose out of and in the course of his employment. The employers, upon this, presented a petition to the sheriff for warrant to disinter the body, stating that the cause of the man's death was unknown, and could not be certified without a *post-mortem* examination. A medical man who saw the deceased shortly before his death and remained with him until he died, was, it was stated, unable to certify, and declined to certify the cause of death. The Sheriff, after hearing parties' solicitors, granted the order craved for the exhumation of the body.

Presentation to Professor Monro.

Professor T. K. Monro, who was till recently Professor of Medicine in St. Mungo's College, and who has been appointed to succeed the late Professor Samson Gemmell in the chair of that subject at the University, received on the 25th ult. a presentation from a number of his former staff at the Royal Infirmary. Dr. H. H. Borland presided, and the presentation was made by Dr. Campbell Marshall. As Professor of Medicine in the University, Dr. Monro will now teach clinically in the Western Infirmary.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE TEACHING OF SCIENCE.

To the Editor of The Medical Press and Circular.

Sir,—Many of us are taking interest in the teaching of science in our schools. Our old ideas have changed, and we don't feel so sure that classics and mathematics are all that we want our boys taught till they leave school and start on the life they are going to follow. We used to think it best to put off science teaching for those who were going into the medical profession till they began their hospital life, and that they were better prepared for this, mentally and physically, by what was taught them at school, and by the exclusion from their studies of those subjects to which they would have to give thought and time when they started for medicine.

It is quite clear to us now that science and a knowledge of modern languages are necessary for those who are going to follow the practice of medicine, and that the boys who have some knowledge of this kind have a great advantage over those whose school teaching has been limited to classics and mathematics. Science may be of little practical use to those who are going into the Church or the Law, but now a knowledge of science, generally and specially, is of such great importance in many occupations which provide those that follow them with the means to live well and independently, that our schools are obliged to distinguish clearly between what they call the classical and the modern sides. At our chief universities the greatest changes have taken place, and the science schools have grown up in a remarkable manner.

Now, if we were asked to state clearly and simply what science we should like our boys taught at school, when the medical profession is what we have settled for them, we should not find it easy to draw up a system of study which could be carried out in our great public schools.

In the teaching of science we have to follow such a different plan from that which is best for mathematics and classics. It is not from books alone that science is to be learnt, if it is to be turned to practical use in professional life. Very little encouragement has been given at most of our schools to the teaching of science, and the classical side has assumed a superiority over it, and has treated it with a kind of contempt that has led those who would be most capable as teachers to hold back from and avoid it. There is another very important point which has to be considered, and that is the proper provision in schools of the rather expensive apparatus that the teacher must have if he is to teach well, and which he certainly cannot be expected to provide at his own expense. To lecture well on such subjects as heat, light or electricity requires apparatus, and when we consider what a wide subject chemistry is, we must allow that it is difficult to decide how it can be taught at schools. Probably the best answer we must make to the question how we would like our boys taught would be that we should leave this in the hands of those who we are sure are capable as teachers and are provided fully with what they require in their lecture rooms and laboratories, and that there should be no mean payment allowed for the work they are carrying on. There is not the least doubt but that in this country teachers are not paid properly and that a very different view is taken in Germany, France and our Colonies of what is the great value of such work. It would be well if more attention were given by the medical profession to the teaching of science, and that it should not be left to those who have no practical knowledge of the practical purposes to which science teaching can be turned in professional life.

I am, Sir, yours truly,
L.

ON THE ACCURACY OF THE "MEDICAL REGISTER," WITH A NOTE ON MEDICAL CERTIFICATES.

To the Editor of The Medical Press and Circular.

Sir,—May I once more ask you for your valuable assistance in reminding members of the profession that, unless their names appear in the *Medical Register*, they are not "legally qualified medical practitioners" (Medical Act, 1858, Section 34), and that the duty of notifying changes of address rests with them.

No person can "hold any appointment as a physician, surgeon, or other medical officer either in the military or naval service or in emigrant or other vessels, or in any hospital, infirmary, dispensary, or lying-in hospital, not supported wholly by voluntary contributions, or in any lunatic asylum, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish union, or other public establishment, body or institution, or to any friendly or other society for affording mutual relief in sickness, infirmity, or old age, or as a medical officer of health, unless he be registered" (Section 36); and "no certificate required by any Act now in force, or that may hereafter be passed, from any physician, surgeon, licentiate in medicine and surgery, or other medical practitioner, shall be valid unless the person signing the same be registered" (Section 37).

The *Medical Register* is the only official publication, and it should not be confused with any of the various directories which issue circulars annually.

No one who is not familiar with the work of this office would believe the amount of trouble which is taken to keep in touch with practitioners, and to find them when touch has been lost, but, unless we are assisted by members of the profession themselves, our efforts are often fruitless.

In consequence of cases which have recently occurred it becomes increasingly important every year that the Registrar should carry out the duty laid upon him under Section 14 of removing from the *Register* the names of practitioners with whom he cannot communicate. It is done with reluctance, but only by this means can the public and the profession be protected against inpostors. No doubt cases of hardship do sometimes arise in consequence of this removal of names, but every possible source of information is made use of to save practitioners from the results of their own forgetfulness, and if they are inconvenienced by finding that their names are off the *Register*, the blame does not rest with this office. The duty of notifying changes of address rests with practitioners; the Registrar is obliged to send communications to registered addresses only, but the practice is to make use of every available source of information.

I therefore hope that all practitioners who have any doubt as to the accuracy of their addresses in the *Register* will communicate with this office without delay, and, if they will give their full names and qualifications in legible writing, it will be of great assistance to us. All communications will be duly acknowledged.

Perhaps I may add that, by a recent regulation, practitioners possessing medical and dental qualifications, if already on the *Medical Register*, may register in the *Dentists' Register*, or vice versa, for a reduced fee of £2 1s., instead of £5 1s.

I should like to take the opportunity of drawing attention to the following resolution adopted by the Council on November 30th, 1911; it cannot be urged too strongly upon practitioners that, in giving certificates, they are recognised by law as members of a trusted profession, and that it behoves them to exercise the greatest possible care in the matter:

> Whereas registered medical practitioners are in certain cases bound by law to give, or may be from time to time called upon or requested to give, certificates signed by them in their professional capacity, for subsequent use either in courts of justice or for administrative purposes: And whereas such certificates include, *amongst others*:
>
> (*a*) Under any statute relating to births, deaths, or disposal of the dead;
>
> (*b*) Under the Lunacy Acts;
>
> (*c*) Under the Vaccination Acts;
>
> (*d*) Under the Factory Acts;
>
> (*e*) In relation to children, or to excusing school attendance;
>
> (*f*) In connection with sick benefit, insurance, and friendly societies;
>
> (*g*) In connection with workmen's compensation;
>
> (*h*) In connection with naval or merchant shipping;
>
> (*i*) For procuring the issue of Foreign Office passports;
>
> (*j*) For excusing attendance in courts of justice, in the public services, in public offices, or at ordinary employments;
>
> And whereas it has been made to appear to the General Council from time to time that some registered medical practitioners have given and signed untrue, misleading, or improper certificates of the above specified or other descriptions.
>
> Now, therefore, the General Medical Council hereby give notice that any registered medical practitioner who shall be shown to have given any untrue, misleading or improper certificate, whether relating to the several matters above specified or otherwise, is liable to be adjudged by them to be guilty of "infamous conduct in a professional respect," and have his name erased from the *Medical Register* under Section 29 of the Medical Act, 1858.

I am, Sir, yours truly,
Norman C. King,
Registrar.

299, Oxford Street, London, W.,
September 26th.

NEWSPAPERS AND QUACKERY.

To the Editor of The Medical Press and Circular.

Sir,—In a letter in your paper of this week one of your correspondents writes: "The trade in nostrums engages a vast amount of capital; it suborns great numbers of newspapers," etc., etc. An illustration of this fact has been since afforded in many leading papers, London and provincial. Having observed it in one, I have sought it in more, and I enclose specimens. These papers, as you will see, all publish more or less lengthy reports of a speech of Dr. Robert Simpson, of Plymouth, on the subject of medicated wines at a recent meeting of the Temperance League. He pointed out that during recent years a new factor had arisen in the temperance problem which threatened to become a very serious obstacle in the way of reform unless it was recognised and steps taken to combat its evil effects. He referred to the introduction in a most attractive form of so-called medicated wines. Dr. Simpson showed how the insidious danger of these products was increased many fold before the public, chiefly because of their food values, or the tonic or medicinal values which they were supposed to possess. Dr. Simpson urged that the public lost sight of the fact that in order to obtain a very small quantity of nutriment they had to swallow a considerable amount of alcoholic stimulant. It was a not uncommon thing to find persons who were total abstainers taking these preparations in utter oblivion of the fact that they were practically drinking ordinary wine. Numbers of cases of inebriety, he added, owed their origin to indulgence in some form or other of medicated or tonic wines.

These utterances of Dr. Simpson's, wise and admirably adapted as they are to his audience, are, of course, mere commonplaces to the medical profession, and especially to those who, like myself, devote much attention to the "temperance" question. What I want to call the attention of my medical brethren to is the fact which the enclosed cuttings will show—viz., that leading newspapers, whilst printing Dr. Simpson's speech, publish in other pages, or even in adjacent columns, huge illustrated advertisements of the compounds he denounces. Can the astute managers and owners of these papers be ignorant of the evils he exposes; and how do they reconcile their conduct in the field of money-making with the lofty morality preached in the editorial columns? Ingenuous readers, seeing Dr. Simpson's speech in one page and the advertisement of a wonderful cure-all in another, would need nothing more to lead them to swallow the poisonous baits; they must believe that any advertisement in such a high-toned paper would be above suspicion.

I am Sir, yours truly,
MEDICAL TEMPERANCE REFORMER.

October 2nd, 1913.

RACIAL PREJUDICE IN MEDICAL PRACTICE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In giving your advice that Indian doctors in England should go and practise in their own country, are you not pandering to the prejudice of the few and unwittingly doing an injustice to a great number of His Majesty's subjects? The Indians might retaliate and say that because some of their countrymen are prejudiced against the English, therefore the English doctors in India should leave the country and come home and practise here. In the palmy days of Rome, when a man became a Roman citizen he had perfect freedom to serve in any part of her dominions. Unless the idea of British Empire is a farce and a sham, Indians (who come from the same Aryan stock as the English) should have as much liberty to practise where they like as the English or any other of His Majesty's subjects.

I am, Sir, yours truly,
D. J. A. C. MUTHU, M.D.

Wells, Somerset.
October 4th, 1903.

[There is no getting over the fact that anyone who attempts to practise medicine as a foreigner with a colour distinction, be it a negro in England or an Englishman in China, must be prepared to put up with a good deal of racial prejudice. Our comments were based on an entirely sympathetic attitude, and it was pointed out that in spite of such opposition it was possible to attain considerable and sometimes even brilliant success in the United Kingdom. There is, of course, no legal impediment in the way of such a settlement.—ED. M.P. and C.]

THE OATMEAL INSTINCT IN HYPOTHYROIDISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Recent experiments of the American Board of Health have shown that mice fed on oatmeal can take with impunity a dose of prussic acid forty times as great as that which would prove fatal to the ordinarily fed animal. It is further found that the effect of the oatmeal is not only a chemical reaction, but an increase in the activity of the thyroid gland.

I have under my care a patient suffering from hypothyroidism, and she evinces an extraordinary craving for oatmeal. This has often been noticed in anæmic and chlorotic conditions, and must be, I think, a physiological instinct for food substances which activate the thyroid gland, of which the secretion is usually subnormal in these cases.

I am, Sir, yours truly,
J. C. MCWALTER, M.D.

Dublin.
September 28th, 1913.

REVIEWS OF BOOKS.

MEDICO-LEGAL BOOKS.

Sir John Collie's book on *Medico-Legal Examinations and the Workmen's Compensation Act* (*a*) will be found of much help to all medical men who are concerned with the examination of claimants under the Act. Probably no medical man in the Kingdom has a larger experience of this kind of work than Sir John Collie, and while he has full sympathy with the workman injured in the course of his employment, no one is more clever or resourceful in detecting fictitious or imaginary claims. From the storehouse of his experience he brings forth many histories which are typical of the various improper claims that are put forward, often, it is to be feared, with the connivance of members of the medical profession. Sir John gives a brief but clear and helpful summary of the provisions of the Act. In another chapter he enumerates some of the more peculiar decisions which have been given by the courts, and we must agree with him that there is some excuse for those who think that the intentions of the framers of the Act have been largely extended in favour of the workman by the recorded decisions. Indeed, no matter how flagrant may be the breach of discipline which causes an accident, the employer seems to be responsible. Sir John Collie closes with reasonable suggestions for the amendment of the Act. He presses strongly—and here again we agree with him—for a much wider employment of medical referees, and for giving them extended powers.

The Trial of William Palmer (*b*).

has more matter of interest to medical readers than some other volumes of the "Notable Trials Series." Palmer was himself a medical man, a fact which had a considerable bearing on the history of the crime. The number of medical witnesses examined was enormous—no less than thirty-two out of a total of sixty witnesses. It can hardly be claimed, moreover, that out of so great a multitude any great certitude emerged. The case to this day presents difficulties. That Palmer murdered his friend Cook is fairly certain, and there is good reason to believe that several other persons, including his illegitimate child, his mother-in-law, his wife, and his brother, were also his victims. The circumstances of the death of Cook, however, for whose murder Palmer was hanged, are still far from clear. The week prior to his death, while in company with Palmer, Cook suffered from vomiting and diarrhœa, a circumstance on which the Crown relied as evidence of attempted poisoning by tartar emetic. From this sickness he recovered, but he died a few days later with undoubted symptoms of poisoning by strychnine. The *post mortem* analysis by Taylor failed to discover strychnine in the body, but established the presence of antimony. For Taylor's failure to find strychnine, of poisoning by which he maintained that Cook died, he was unable to offer a satisfactory explanation. For the defence much medical evidence was led to suggest that the symptoms on which the Crown relied as evidence of strychnine poisoning might be

---

(*a*) "Medico-Legal Examinations and the Workmen's Compensation Act, 1906." By Sir John Collie, M.D., J.P. Demy 8vo, pp. 128. London: Bailliere, Tindall and Cox. 1912. Price 5s. net.

(*b*) "The Trial of William Palmer." Edited by George H. Knott Barrister-at-Law. (Notable English Trials.) Edinburgh: Williams, Hodge and Co., 1912. Pp. xii. and 320. Price 5s. net.

due to other causes, such as epilepsy, syphilis, and idiopathic tetanus, but it failed to convince the judge or jury. Some interesting ethical points arose in the history of the case. The leading medical witness for the prosecution, Dr. Taylor, was so foolish as to discuss the case in a letter to the *Lancet* prior to the hearing. On the other hand, the leading counsel for the defence, Mr. Sergeant Shee, committed an equally grave breach of etiquette. In his address to the jury he laid stress on his personal conviction of the innocence of the prisoner. Mr. George H. Knott, who edits the volume, has performed his duties carefully and judiciously.

Drs. Robertson and Mc Kendrick's epitome of *Public Health Law* (*a*) is a wonderfully concise and comprehensive volume. In the space of four hundred pages the authors give the essence of the various public health laws in force in Scotland, in England and Wales, and in the United Kingdom. Various references to laws applicable only to London or to Ireland are given in their proper places. The index might have been a little fuller with advantage, but there is, as a matter of fact, little trouble experienced in finding the desired references. The volume will be invaluable as a handy guide to all concerned with public health administration in Great Britain.

Dr. F. J. Smith's *Law for Medical Men* (*b*) is a book of quite different scope. It is not specially concerned with public health law, though that subject is by no means ignored. It is not, on the other hand, a text-book of forensic medicine. It may, however, be regarded as the necessary supplement to such a text-book, in that it furnishes the legal documentation which cannot conveniently be given in the ordinary text-book. Dr. Smith's position as one of the leading medical jurists in England is a guarantee of the soundness of his work. He opens with a valuable chapter on the Acts of Parliament relating to the several licensing bodies of the Kingdom, and quotes the disciplinary powers possessed by each body. Speaking generally, these powers are most precise and most extensive in the case of the younger corporations. We miss any reference to the powers of the Royal College of Physicians of London with regard to the control of medical practice in London. There is an excellent chapter on the functions and powers of the General Medical Council. Contrary to general opinion, it appears that there is a legal definition of "infamous conduct in a professional respect." This was given by the Court of Appeal in 1892—"if it is shown that a medical man, in the pursuit of his profession, has done something with regard to which it would be reasonably regarded as disgraceful or dishonourable by his professional brethren of good repute and competency, then it is open to the Council to say that he has been guilty of infamous conduct in a professional sense." The application of this principle to concrete cases will, of course, present many difficulties, and the judgment of the Council will alter with the development of the sense of the profession as to what is honourable and proper conduct. We have not space to follow Dr. Smith through his summary of the various laws of importance to medical practitioners. The value of the summary is greatly enhanced by the author's judicious discussions on the various points. He expresses himself with force and decision, and we gratefully add, with humour.

Malingering, (*c*) by Sir John Collie deals with the same question, but covers a much wider field. It is curious that so little has been systematically written on the subject of malingering, and the appearance of a work dealing therewith is peculiarly appropriate at the present time. The responsibilities cast on medical men under the National Insurance Act increase greatly the importance to the profession of a knowledge of malingering. It is true that in regard to this Act the medical man is in a better position to detect malingering than is the medical examiner in a case of claim for compensation, since, under the Insurance Act, it is, at any rate in the first instance, the patient's own medical attendant who has to come to an effective decision. Any medical man who has to examine patients who may be suspected of malingering will learn much from Sir John Collie. He is an old hand, and is apparently up to all the tricks. It is true that the incautious reader may be so carried away by Sir John's shrewdness as to be anxious to detect fraud where there is none, though we do not think that this is the author's own attitude. He appears to us scrupulously fair, even if very searching. The medical examiner's object should be the discovery of truth, and not the pecuniary benefit of either the claimant or the person on whom the claim is made. After a few introductory chapters, Sir John Collie deals systematically with the examination of the various organs of the body. He then discusses points which may give rise to special difficulty, such as the relations to malingering of hernia, epilepsy, and insanity. He gives useful advice as to the conduct of a medical witness in court, and as to the drawing up of medical reports for perusal by laymen. Not the least helpful part of the book is the introduction of reports of illustrative cases. Sir John Collie is very severe—sometimes unduly so, though there is much excuse for warm feeling and straight speech—in his criticism of other medical men who may have differed with him at one time or other. We do not know what he would say if he heard one of his *confrères* suggesting, as he does (page 235), that "a temperature" is a sign of fatty degeneration of the heart. It is probably only looseness of expression which permits him to speak (page 119) of sound "reaching the brain through the bones of the skull." We commend Sir John Collie's book as an able and helpful expression of personal views and unique knowledge on a subject of much importance.

OUR OUTSIDES. (*a*)

The talented author of this extremely interesting book is far too modest in his prefatory remarks concerning its aims and objects. After such rich mental fare as "Herbal Simples" and "Precious Stones," we expected something good from between its enticing brown covers, and we have not been disappointed. The ability to read character from facial or cranial conformation is one possessed by only a chosen few, but medical men have abundant opportunities for exercising the art of character-telling. Every part of the visible person is dealt with systematically in this volume, and yet there is remarkably little of the text-book about it. Rather is it a rich collection of observations respecting the features, temperament, gait, hand-shaking, stature, the hands, the feet, the finger-nails, mannerisms, &c.; in short, nothing about the human personality that indicates in any manner character or disposition appears to be omitted. The antiquarian and collector of epigrams, and all lovers of literature will simply revel in this anthology of folk-lore and philosophy regarding our externals. The author is right when he speaks of "nursing morose discontent until the feeling becomes a morbid chronic ailment." So do a man's habitual thoughts impress themselves indelibly upon his countenance. The ladies will be comforted by the reflection that "facial wrinkles appear sooner in a man than in a woman; and they are deeper in nervous men, whose faces are very mobile." The more advanced section of woman-

---

(*a*) "Public Health Law: An Epitome of Law Applicable to England and Wales and Scotland." By William Robertson, M.D.Glas., D.P.H. and Archibald McKendrick, F.R.C.S.Edin., D.P.H. Pp. xii. and 397 Edinburgh: E. and S. Livingstone. 1912. Price 5s. net.

(*b*) "Law for Medical Men: A Book for Practitioners, Containing Extracts from Acts of Parliament Interesting to Medical Men." By Fred. J. Smith, M.D., F.R.C.P. Pp. xii. and 402. London: J. and A. Churchill, 1913. Price 10s. 6d. net.

(c) "Malingering and Feigned Sickness." By Sir John Collie, M.D. J.P., Assisted by Arthur H. Spicer, M.B., B.S., D.P.H. Illustrated Pp. xii. and 340. London: Edward Arnold. 1913. Price 10s. 6d. net.

(*a*) "Our Outsides: and what they Betoken." A Summary, by W. T. Fernie, M.D., Author of "Herbal Simples," &c. Pp. xv., 413. Bristol: John Wright and Sons, Ltd. 1913. Price 4s. 6d.

kind will not be pleased with the remarks on page 363 as to the true functions of the gentler sex. Such minutiæ as the manner of wearing the hat (which, by the way, is always *Hat*!), or of blowing the nose (also *Nose*), the varying tones of the voice, the colour of the hair and eyes, and the attitude adopted when at rest, are all significant of mental traits, and as such may be regarded by the would-be physiognomist. These features cannot be hidden, but are open to the inspection of him who has eyes to see. As a charming companion for leisure moments we can cordially recommend Dr. Fernie's book to our readers, for it will assuredly have a very wide circulation indeed.

THE DISEASES OF CHILDREN. (*a*)

The fifth volume of "The Diseases of Children" is entirely devoted to the surgical aspect of this subject. This it treats from a general practitioner's point of view. Its aim is more to present a concise survey of those conditions in which surgical and orthopædic interference may become necessary, and the various procedures that may be employed in dealing with them than to give a detailed account of pathology and surgery for the specialist.

The writer, Dr. Hans Spitzy, who is responsible for nearly the whole of this part of the work, discusses most fully the methods he employs at the K.K. Kinderklinik at Gratz (Austria). Professor Fritz Lange, of Munich, contributes the articles on Deformities of the Vertebral Column and Thorax. The American translators have added a few comments.

The work is conveniently arranged for reference, and is divided into the following sections:—I., Congenital Diseases; II., Disturbances in Post-Fœtal Development; III., Surgical Infectious Diseases; IV., Injuries; V., Affections of Neurogenic Origin; VI., Tumours.

Section I., which would more appropriately come under the heading "Congenital Deformities," systematically discusses the abnormalities of each part of the body. Here, as throughout the work, in order to ensure correct diagnosis, there is a good deal of descriptive text. Pathology and treatment receive their share of attention. For instance, under hernia, Kocher's and Bassini's *technique* for its radical cure is fully described. Spitzy, in eleven hundred cases, had only four deaths; two from epidemics, one from pneumonia, and one from status thymicus. In nurslings he uses no anæsthesia, to avoid risk. His simplified operation on infants takes from four to eight minutes.

Section II. discusses principally scoliosis, flat-foot, and deformities due to rickets. Tuberculous diseases of bones and joints are fully considered in Section III. The writer does not believe in the routine removal of tuberculous glands, but prefers Bier's treatment, and the aspiration of pus as it occurs. He says (p. 211), "Up to 1904, 100 out of a total 500 operations annually in the author's service were for the removal and scraping out of glands. In the last four years, out of a total of 3,000 operations not more than three were for the removal of glands."

Section IV. contains some useful information on the treatment of fractures. The writer describes his results from neuroplasty, arthrodesis, etc., in Section V. The last section, on tumours, completes the work.

The fifth volume of "The Diseases of Children" contains 199 illustrations, most of which are good, and suitably depict the conditions referred to in the text. The reproduction of some of the skiagrams is poor. On the whole, this volume carries out its purpose well, and gives a good general review of Continental methods in sufficient detail to be instructive as well as interesting. The translators, Drs. Shaw, Manning, and Leo Wolf, have done their part to make the work a success.

SURGERY. (*a*)

The concluding volume of "Keen's Surgery" is written with the object of bringing the previous five volumes up to date, as it was found that although the last of them was published as recently as 1909, the progress of surgery has been so rapid as to call for the revision of much of the earlier matter. A few new chapters have been added to provide for the discussion of such subjects as recent apparatus for operating on the thorax, Moltzer and Auer's method of anæsthesia, the surgery of the hypophysis, the use of salvarsan, the intra-venous injection of ether as an anæsthetic, etc. This volume also contains a general index of all six volumes.

The present method of bringing out an additional volume, when revision is required within a short time, is an eminently practical and sound plan, and one which, if adopted widely in works of large size, will mean a considerable saving of expense to medical readers.

SURGERY OF THE LUNGS. (*b*)

Nothing could exceed the interest and completeness with which the subject of lung surgery is treated by Professors Garrè and Quincke in the second edition of their book. We have never read a book which dealt more satisfactorily with each question of difficulty and with so many in a short volume. It indeed brings home to us how much behind Continental surgery our British conservatism has left us. Of particular value are the chapters on thoracic anatomy and the methods of producing differential pressure in thoracic surgery, while in Chapter V. pros and cons of treatment in injury to the lung are brilliantly argued. Unfortunately, the faulty punctuation makes the translation hard to follow, and occasionally the English itself is obscure. For instance, on page 110 is the following:—"So that within an extensive zone of suppuration, softening inflammation often only isolated spots develop gangrene, or . . . ." The above is inexcusable, yet a study of the excellent teaching in the volume will, we hope, stimulate our surgeons to lay less timid hands on that sanctuary of disease—the thorax.

LAWS OF SEXUAL PHILOSOPHY. (*c*)

The object of this book is to bring to the student of gynæcology and obstetrics a psychological sketch of the history of the sexual life of the human race, and an exposition of Eastern and Western sexual science, from the medical, moral and social point of view. The author, Dr. Chundra, of Calcutta University, has a reputation as an authority on historical unexplained aphorisms connected with Hindu sexual science, and this book bears many marks concerning an exceedingly important but difficult subject, and which are treated in a tactful and plain manner.

In the first chapter, the laws of menstruation are dealt with, considering its definition, history, the superstitions connected with it, whether it be a physiological or pathological process, the purpose of menstruation, and the management of menstruation, with its anomalies, derangements, and the menopause. In the second chapter are given the laws of the reproductive organs, followed by laws concerned with sterility, sexual life, instinct and intercourse, sexual inversion and perversion, and marriage are discussed with valuable historical notes.

The ignorance concerning sexual matters which exists amongst girls and young women is incredible and is most probably the basis of many of our social ills, and anyone honestly endeavouring to solve the difficult problem of sexual matters will find a great help in making themselves acquainted with the contents of this small manual.

(*a*) "The Diseases of Children." A work for the Practising physician. Edited by Dr. M. Pfaundler and Dr. A. Schlossmann. English Translation edited by Henry L. K. Shaw, M.D., and Linnæus La Fétra, M.D. In five volumes. Illustrated by 90 full-page plates in colours and 773 text cuts, of which 72 are in colour. Vol. V. Pp. iv. and 364. Philadelphia and London: J. B. Lippincott Company. 1912. Price 21s. 2d. net.

(*a*) "Surgery: Its Principles and Practice." By Various Authors. Edited by William Williams Keen, M.D., LL.D. Vol. VI. "The New Surgery," with general index to Vols. I. to VI. Illustrated. Pp. 1,177, with index. Philadelphia: W. B. Saunders Company. 1913. Price 34s.

(*b*) "Surgery of the Lung." By C. Garré and H. Quincke. Translated from the German by David M. Barcroft, M.D., 2nd edition. Pp. 258. London: John Bale, Sons and Danielsson.

(*c*) "Laws of Sexual Philosophy." By J. L. Chundra, of Calcutta. 1913.

It may interest our readers to know that a little book by Dr. E. G. Younger, "Insanity in Everyday Practice," now in its second edition, has been translated into the Chinese language under the auspices of the China Medical Missionary Association, and is published in Shanghai. Dr. Cousland, one of the translators, says in his preface: "It should enable the Chinese practitioner to diagnose cases of insanity and make the best arrangements possible for their treatment, the latter by no means an easy matter in the almost total absence of asylums. Also it should enable him to recognise the beginnings of mental disorders when there is yet time for preventive treatment."

* * *

Volume I. of the *Dublin University Calendar* for 1913-14 has just been issued. In addition to regulations concerning the various University courses, and other information necessary to the student, this part of the Calendar contains the ordinary examination papers set in the academic year 1912-13. These papers do not appear to be arranged in any regular order, and are printed without an index.

MEDICAL NEWS IN BRIEF.

The Royal Society of Medicine—Section of Odontology.

The following regulations have been issued respecting grants in aid of scientific research:—

1. That the grants exist for the furtherance of scientific research in connection with dentistry.

2. That all grants shall expire on May 1st next following the date in which they are made, when a statement of expenditure shall be forwarded to the Hon. Secretary, 1 Wimpole Street, W.

3. That no part of any grant shall be applied in payment of personal expenses in connection with the research for which the grant has been made, unless a resolution to that effect has been duly passed by the Committee. Every recipient of a grant shall be deemed to have notice of these rules.

4. That when the whole of the expense of the enquiry has been provided by the Committee the result of the investigation shall be the property of the Section of Odontology of the Royal Society of Medicine.

In any case in which the author desires to publish a report of work done under a grant from the Committee, elsewhere than in the Transactions of the Society, it shall be a condition of the grant that the permission of the Committee be first obtained, and the following note be affixed to the published report:—"Towards the expenses of this reseach a grant was made by the Section of Odontology of the Royal Society of Medicine."

5. That apparatus purchased with the grant shall be the property of the Royal Society of Medicine, and be returned at the expiration of the grant, unless the Committee shall otherwise determine.

6. That a report shall be furnished to the Committee by the recipient of the grant (or an interim report if the object of the grant be not then attained) on April 20th, following the allotment, containing:—

(*a*) A brief statement of the report of the Scientific Grants Committee, showing the results arrived at or the stage which the enquiry has reached.

(*b*) A general statement of the expenditure incurred, accompanied, so far as possible, by vouchers.

(*c*) A list of the instruments, specimens, etc., purchased or obtained out of the grant or supplied by the Committee, which are still in the possession of the recipient.

(*d*) Reference to any Transactions, Journals, or other publications in which the results of the Research have been printed.

(*e*) If a renewal be desired an application should be sent at the same time.

New Laboratory for Glasgow.

Lord Rowallan, Chairman of the Governors, presided last week at the opening of a clinical research laboratory, given to the Victoria Infirmary, Glasgow, by Mr. William Robertson, shipowner. The laboratory is a two-storey building The first floor is described as the workshop, and will be used by the attendant for preparing the various media. In this portion of the building there is also a lecture-room. The flat above will be utilised for the laboratory proper. Here there is a large clinical laboratory, and adjoining it is a chemical laboratory, where tests and chemical examinations can be made. A special room has been fitted up for weighing in a fine balance. There is also a vaccine room, while other departments include a sterilising room and an incubator room. The laboratory has been built and equipped under the guidance of a committee, consisting of Dr. Donald Mackintosh, Superintendent of the Western Infirmary, Glasgow; Dr. Ebenezer Duncan and Dr. Grant Andrew.

A Florence Nightingale Memorial.

A memorial to Miss Florence Nightingale was unveiled the other day at Liverpool outside the Central Home of the Liverpool Queen Victoria District Nursing Association. Out of the funds collected four Florence Nightingale nurses have been endowed. The memorial, the erection of which was defrayed by the balance of the funds, takes the form of a panel representing Florence Nightingale carrying out the mission of her life to sick and suffering humanity.

Scarlet Fever in Birmingham.

A severe epidemic of scarlet fever is reported from Birmingham, 900 cases being under treatment in the isolation hospital. During the past week 223 fresh cases were notified to the authorities, and 232 in the previous week, which is the highest number since the extension of the city boundaries. Only seven deaths have been reported during the fortnight. A number of patients are treated in their homes, and it is estimated that there are at least 1,100 cases in the city.

London School of Tropical Medicine.

The winter session opened last week, sixty students having entered their names. The additional laboratories, rendered possible by the fund raised by Mr. Austen Chamberlain, are being occupied for the first time. The new course in Tropical Sanitation and Hygiene, open to students who have already attended the ordinary course, will be inaugurated this session, the first lectures being held about the 20th inst. The increased accommodation for resident students has also been made available, and all the rooms have already been let. The annual dinner will be held at Prince's Restaurant, Piccadilly, W., on Friday, October 24th, under the presidency of Dr. F. M. Sandwith.

Large Bequest to Glasgow University.

The trust settlement of Dr. Gavin Paterson Tennent, of Bath Street, Glasgow, dated July 3rd, 1913, has been lodged in the Register House, Edinburgh. He bequeaths £25.000 to the governing body of the University of Glasgow, to be applied for such objects or object in connection with the faculty of medicine as the trustees may determine. He also bequeaths the residue of his estate to the Western Infirmary, the Royal Infirmary, the Victoria Infirmary, and the Royal Hospital for Sick Children, Glasgow.

A Medical Man's Fatal Fall.

Last week, at the Marylebone Coroner's Court, Mr. C. Luxmore Drew held an inquest on the body of Henry George Walker, aged 70, a doctor of medicine, lately residing at Marloes Road, Kensington, who died from injuries received by falling down the well of a lift at a nursing home in Henrietta Street, Cavendish Square.

Dr. Arthur W. Read, of Southwell Gardens, said he went with Dr. Walker, who was a very delicate man, on Saturday to the nursing home to see a patient; while they were waiting for the lift Dr. Walker stepped backwards and fell down the well into the basement, a distance of about 15 feet. He did not know who had opened the gate of the lift, but it was opened, and he thought Dr. Walker might have done it.

A servant at the home stated that she pressed the button to bring the lift down from the floor above. The gate of the lift was open a few inches as the lock was not working, and she thought Dr. Walker must have opened it still further when he fell.

Dr. Edward Corner, of Harley Street, said that Dr. Walker suffered from heart disease, and death took place on Tuesday from syncope consequent upon the shock of the accident.

A verdict of accidental death was returned.

Treatment of Tuberculosis in Birmingham.

A report on the administration of sanatorium benefit in Birmingham during the year ended July 14th states that an agreement has now been entered into with the Birmingham Corporation for a period of 30 years under which the Corporation will provide the whole of the institutional treatment of insured persons suffering from tuberculosis and recommended by the Insurance Committee within the limits of accommodation and facilities provided by the Corporation's scheme for insured and non-insured persons. This scheme when in full operation will provide 409 beds at four sanatoria. The Broad Street Tuberculosis Dispensary will be able to deal with 2,000 patients a week. The treatment provided in the Corporation sanatoria has been widely appreciated, though 58 patients neglected or declined to take advantage of sanatorium treatment and 31 refused the dispensary treatment recommended.

A table giving the occupational incidence of pulmonary tuberculosis shows that engineers sent the greatest number for treatment—namely, 130 males and 18 females. The brass trade sent 120 males and 22 females. General labourers numbered 104. Domestic servants (103), pressworkers (66), warehouse workers (43), and clerks (36) are the heaviest totals on the female side. The average for the whole city is 1.9 per 1,000. The income for the year was £12,697, and the expenditure £11,849.

Damages for Neglect to attend a Panel Patient.

The question of the responsibility for the non-attendance of a panel doctor upon an insured patient was last week argued in a case which came before Judge Thomas at Liverpool County Court. George Titherington, a clerk, who is a minor, sued through his father to recover £2 6s. damages from Dr. John Dunlop, of Anfield, for failure or refusal to attend him after accepting him as a panel patient. Plaintiff, his counsel said, caught a chill after playing football, and next morning began to spit blood. His parents sent for Dr. Dunlop, on whose panel plaintiff was. The doctor was out, but a message was left that the case was urgent. As the doctor had not called three hours later, counsel went on, two of plaintiff's sisters went to his house at 6.30. They saw the doctor, and asked if he intended to come or not, to which the doctor replied, "I can't go now; I wan't recreation just as much as anyone else does; I will come as soon as it suits me." Counsel added that if the Court accepted the evidence of the plaintiff, this was clearly a case where the doctor ought to be compelled to pay the fees which the plaintiff's father had been obliged to pay because the defendant would not attend a patient whom he had accepted. Dr. Dunlop never attended the plaintiff at all, for about eight o'clock the boy's condition became such that Dr. Nixon was sent for and at once took up the case, which proved to be one of pneumonia.

Evidence having been given, counsel for defendant submitted that it was the Insurance Committee's obligation to provide people with medical treatment. The Insurance Committee made arrangements with the doctors, and it was with the Insurance Committee alone that the plaintiff could deal. If there was any failure on the part of the defendant, it was the Committee's default, and the plaintiff must call the Committee to answer for it.

His Honour found against the defendant on the legal points, and upon the facts expressed the opinion that the defendant had been actuated by temper at what he considered the ill-behaviour of the girls. He gave judgment for the plaintiff for the amount claimed, with costs, and allowed an appeal.

King's College Hospital.

The annual dinner of past and present students of King's College Hospital took place last week at the Waldorf Hotel under the presidency of Viscount Hambledon, Chairman of the Hospital and of the Medical School. During the afternoon many past students visited the new King's College Hospital at Denmark Hill, and were conducted over the building by the Dean and other members of the staff, being afterwards entertained at tea. It was stated that the opening of the hospital for out-patients would take place about the middle of October. Among those present at the dinner were Dr. Arthur William May (Director-General of the Medical Department of the Navy), Sir C. P. Lukis (Dirctor-General of the Indian Medical Service), Mr. A. Boyce Barrow (Consulting Surgeon to the Hospital), Professor Nestor Tirard (Senior Physician of the Hospital), Professor Sir Watson Cheyne (Senior Surgeon), Sir Ronald Ross, Sir St. Clair Thomson, Professor W. R. Smith, Professor Ernest White, and Dr. G. E. Shuttleworth.

Royal Naval Medical Service.

At the examination for appointments as Acting Surgeons, Naval Medical Service, held on September 29th and October 1st and 2nd, 13 candidates were successful and obtained the following marks:—J. S. Elliott, M.B., 1,703; A. J. Tonkinson, M.B., 1,68 A. R. Sharrod, M.B., 1,643; G. J. Kilbride, M.B., 1,578; A. E. Panter, B.A., 1,515; G. S. Harvey, M.B., 1,483; J. P. Blockley, M.B., 1,470; W. H. Murray, M.B., 1,455; J. R. Haldane, M.B., 1,455; G. H. Hayes, M.B., 1,435; W. S. Birch, 1,418; H. C. A. T. Cannon, 1,380; H. J. Hopps, M.B., 1,338. The maximum number of marks obtainable is 2,400.

Middlesex Hospital Medical School.

The following scholarships, medals, prizes and certificates were awarded at the opening of the winter session last week for the session 1912-1913:—

Broderip Scholarship, A. O. Gray first, C. E. Thornton second; Lyell Medal and Scholarship, A. O. Gray; Freeman Scholarship, C. E. Thornton; John Murray Medal and Scholarship, F. W. Browne; Hetley Clinical Prize, T. B. Paul; Leopold Hudson Prize, H. A. Lucas; New Zealand Scholarship, T. Julian; Second Year's Exhibition, D. W. J. Andrews.

Prizes were awarded to the following:—In Medicine, F. E. Feilden; Surgery, F. E. Feilden; Practical Medicine, F. E. Feilden; Practical Surgery, C. P. Sells; Midwifery, O. C. Link; Practical Midwifery, O. C. Link; Pathology, T. C. Kidner; Psychiatry, H. C. Samuel; Forensic Medicine and Public Health, T. C. Kidner; Pharmacology, E. H. Lake; Anatomy, D. W. J. Andrews; Physiology, D. W. J. Andrews; Practical Anatomy, D. C. Ogilvie; Histology, E. H. Lake; Embryology, W. T. Warwick; Practical Pharmacy, L. G. Lunnon; Biology, G. Howorth; Organic Chemistry, F. C. Mason; Inorganic Chemistry, M. B. Tench; Physics, A. I. Cox.

Special certificates were also awarded to a large number of students beyond the foregoing scholarship and prize lists.

Entrance Scholarships.—First Entrance Scholarship, S. C. Shaw; Second Entrance Scholarship, O. L. C. Sibley; Third Entrance Scholarship, G. F. W. Howorth; University Scholarship, J. J. O. Beven; Freer Lucas Scholarship, L. W. Hefferman.

Medical Scholarships.

The following awards of scholarships and exhibitions are announced:—

Guy's Hospital Medical and Dental Schools.—Senior Science Scholarships for University Students:—£50, Arthur Gerald East, St. John's College, Oxford; Junior Science Scholarships—£120, Eric Clark Hinde, Preliminary Science Class, Guy's Hospital; £60, Frederick Currer Hiller, St. Paul's School; Entrance Scholarship in Arts—£100, Eric Roland Webb, Dean Close School, Cheltenham; £50, Gordon Frank

Peters. Certificate:—Myles Wheeler-O'Brien, Oratory School, Edgbaston. Open Scholarship in Dental Mechanics:—£20, Hugh Muir Smith; Scholarship in Dental Mechanics for Pupils of Guy's Hospital—£20, George Dee.

London Hospital Medical College—(1) Price Scholarship in Science—£100, C. S. Cloake; (2) Price Scholarship in Anatomy and Physiology for students of the Universities of Oxford and Cambridge—£52 10s., L. G. Jacob, Christ's College, Cambridge; (3) Science Scholarship—£50, Mr. G. Adler.

University College Hospital Medical School.—Goldsmid Entrance Exhibitions—First, T. H. Somervell, Caius College, Cambridge; second, J. Vincent Bates, Pembroke College, Cambridge; proxime accessit, G. Y. Oliver, University of London, University College.

University College, London.—In the Faculty of Medical Sciences, the Bucknill Scholarship (135 guineas) and the 1st Medical Exhibition (55 guineas) has been divided equally between M. H. Oldershaw, Brighton Municipal Technical College and University College, and D. J. Thomas, St. David's College School, Lampeter, and University College of Wales, Aberystwith. W. Feldman, Central Foundation School and University College, is classed as 2nd Medical Exhibitioner (without emoluments). The Epsom Free Medical Scholarship is awarded to E. V. Correy. In the Faculty of Engineering, a Goldsmid Entrance Scholarship (£30 a year for three years) is awarded to H. P. Gardham, of Bancroft's School.

University of Glasgow.

The following candidates have passed the fourth (final) professional examination for the degrees of M.B. and Ch.B.:—

Douglas Kinchin Adams, M.A., B.Sc.; Nora Maud Aden Allan, Emile Agustine Cameron Beard, Simon Harry Bloom, William Adam Brechin, David Peebles Brown, Margaret Jarvey Brown, Benjamin Cohen, Wallace MacCallum Conley, M.A., Nathaniel Crichlow, Lawrence Crombie, Daniel Augustine Cush, Gabriel Daniel de Kock, Joseph Dunbar, William Campbell Fleishmann, William Forsyth, William Fotheringham, Ian Dingwall Grant, John Galloway Hendry, William John Henry, George Hislop, Mary Pringle Hislop, William Hornsby, Alexander Lindsay, Douglas M'Alpine, James Learmont M'Bean, John Aloysius M'Connochie, L.A.H.Dub.; James Walter M'Donald, John MacInnes, Annie Rankine M'Kail, Donald Mackinnon, James Robertson Cowper Mackintosh, Robert M'Lean, Andrew Paton Martin, Osborne Henry Mavor, Archibald Underwood Millar, M.A.; Michael Murphy, Archibald Naismith, Thomas Murray Newton, James Purdie, Angus M'Innes Ramsay, David Smith, William Robertson Snodgrass, M.A., B.Sc.; William Rowland Taylor, Carel Johannes van Lingen, Robert Bruce Wallace, Matthew White, M.A.

Royal College of Surgeons in Ireland.

The following is the list of awards gained in the examinations during the winter session 1912-13:—

Systematic Anatomy. First (£2) and medal, H. M. Alexander; second (£1) and certificate, K. Elmes.

Practical Anatomy.—First year: First (£2) and medal, H. Graham; second (£1) and certificate, H. M. Alexander. Second year: First (£2) and medal, J. A. M'Kinnon; second (£1) and certificate, D. J. Steele.

Practice of Medicine.—First (£2) and medal, Robert P. Weldon; second, no award.

Surgery.—First (£2) and medal, Trevor S. Smith; second (£1) and certificate, W. Lumley.

Midwifery.—First (£2) and medal, G. M. C. Powell; second, no award.

Pathology.—First (£2) and medal, D. V. O'Connor; second (£1) and certificate, J. O'Brien.

Physiology.—First (£2) and medal, H. M. Alexander; second (£1) and certificate, H. Graham.

Chemistry.—First (£2) and medal, James F. Seale; second, no award.

Physics.—First (£2) and medal, J. F. Seale; second (£1) and certificate, D. J. Steele.

Dental Anatomy.—First (£2) and medal, T. Edwards.

Summer Session, 1913.

Barker Anatomical Prize (£26 5s.), D. V. O'Connor.

Carmichael Scholarship (£15),, C. W. Robinson.

Mayne Scholarship (£8), G. E. Pepper.

Gold Medal in Operative Surgery, no award.

Silver medals in Operative Surgery, E. B. Palmer, and E. Connell (equal).

Stoney Memorial Gold Medal, J. A. Fretton.

Practical Histology.—First (£2) and medal, J. A. M'Kinnon; second (£1) and certificate, L. L. Glick.

Practical Chemistry.—First (£2) and medal, H. L. Mooney; second (£1) and certificate, W. E. Cook and J. G. Thornton (equal).

Public Health and Forensic Medicine.—First (£2) and medal, M. Moran; second (£1) and certificate, H. G. Villiers.

Materia Medica.—First (£2) and medal, C. W. Robinson; second (£1) and certificate, M. Moran.

Biology.—First (£2) and medal, M. Briscoe: second (£1) and certificate, G. Dunne and J. F. Seale (equal).

Surface and Topographical Anatomy.—First (£2) and medal, J. A. M'Kinnon; second (£1) and certificate, K. Elmes.

The Schools re-opened on October 1st. The above prizes will be distributed by the President, Mr. Richard Dancer Purefoy, on Wednesday, October 15th, at 1 p.m.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

L. S. A. (London, W.).—Hypophysis extract has proved very useful for labour pains. It is given by subcutaneous or intramuscular injection in doses of 0.5 to 1 c.c. once, or, if necessary, several times. It is said to be most effective in the first stage of labour in primiparæ, when the os is about four-fifths dilated, and in the second stage the employment of the drug may dispense with the use of forceps.

THE HISTORICAL MEDICAL MUSEUM.

In response to numerous requests, it has been decided to defer the closing of the Historical Medical Museum in Wigmore Street, London, W., until October 31st. During the month of October it will remain open from 10 a.m. to 6 p.m. daily, and from 10 a.m. to 1 p.m. on Saturdays. After this date it will be closed for a few months for re-arrangement as a permanent museum. It is proposed to re-open the museum in its permanent form in the spring of next year.

W. F. R. (Sussex).—According to Dr. L. Robsinson, the genio-glossus muscle has more to do with articulate speech than any other muscle of the tongue. In man the muscle is large, while it degenerates to a mere slit in the pig. It comes into action during every sound we utter, and in the case of a man speaking 150 words a minute its movements are from 400 to 500 per minute.

Dr. Marshall (Edinburgh).—Is thanked for his communication; the changes referred to have been noted for correction in a future issue.

Meetings of the Societies Lectures, &c.

Thursday, October 9th.

Royal Society of Medicine (Section of Obstetrics and Gynæcology) (1 Wimpole Street, W.).—8 p.m.: Opening remarks by the President, Dr. W. S. A. Griffith. Specimen: Dr. Macnaughton-Jones: Pyosalpinx of Accessory Tube. Short Communication: Dr. Macnaughton-Jones: Case of Complete Absence of the Internal Genitalia. Papers: Dr. Frances Ivens: Report of 26 cases of Adnexal Tuberculosis. Dr. Williamson and Dr. Mackenzie Wallis: The Serum Diagnosis of Pregnancy, with a Demonstration of Apparatus and Methods.

United Services Medical Society (Royal Army Medical College, Grosvenor Road, S.W.).—5 p.m.: Presidential Address by Col. A. B. Skinner, A.M.S.

Friday, October 10th.

Royal Society of Medicine (Section of the History of Medicine) (1 Wimpole Street, W.).—5 p.m.: Professor Morris Jastrow. All Members of the Profession, including Students, whether Fellows of the Society or not, are invited to attend this meeting.

Royal Society of Medicine (Clinical Section) (1 Wimpole Street).—8.30 p.m.: Dr. J. D. Rolleston.

Monday, October 13th.

Medical Society of London (11 Chandos Street, Cavendish Square, W.)—8 p.m.: General Meeting. 8.30 p.m.: Introductory Address by the President, Sir David Ferrier, F.R.S., M.D., to be followed by a paper on "Varieties of Facial Spasm and their Treatment," by Dr. Farquhar Buzzard.

Royal Society of Medicine.—5.30 p.m.: Demonstration by Dr. Hideyo Noguchi of pure cultures or spirochætes and of his recent researches upon the virus of rabies.

Appointments.

Bell, R. G., M.D.Glasg., F.R.C.S.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Sunderland District of the county of Durham.

Coombe, T. S., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Hoo District of the county of Kent.

Elliott, G. M., M.B., Ch.B.Edin., Resident Physician at the Edinburgh Royal Infirmary.

Fairweather, D. O., M.B., Ch.B.Edin., Surgeon to the Out-patient Department at the Edinburgh Royal Infirmary.

Gedge, A. S., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Pewsey District of the county of Wilts.

Hartley, J. N. J., M.B., Ch.B.Edin., Resident Surgeon at the Edinburgh Royal Infirmary.

Laird, A., M.B., Ch.B.Edin., Surgeon to the Out-patient Department at the Edinburgh Royal Infirmary.

McKelvey, D., M.B., Ch.B.Edin., Resident Surgeon at the Edinburgh Royal Infirmary.

Owen, A. D., M.R.C.S., L.R.C.P.Lond., Medical Officer of Health to the Hampton-on-Thames Urban District Council.

Robertson, R. K., M.B., Ch.B.Edin., Resident Surgeon at the Edinburgh Royal Infirmary.

Shepherd, W. M., M.B., Ch.B.Edin., Resident Physician at the Edinburgh Royal Infirmary.

Von Ronn, H. A., M.B., Ch.B.Edin., Resident Surgeon at the Edinburgh Royal Infirmary.

Vacancies.

Argyle and Bute Asylum, Lochgilphead.—Assistant Medical Officer. Salary £175 per annum, with furnished apartments, board, and laundry. Applications to the Medical Superintendent.

James Murray's Royal Asylum for Lunatics, Perth.—Physician-Superintendent. Salary £700 per annum, with furnished house and emoluments. Applications to Condie, Mackenzie and Co., W.S., Perth.

Manchester School for Mothers.—Medical Officer. Salary £250 per annum. Applications to the Hon. Secretary, Medical Sub-committee, 339 Oxford Road, Manchester.

Northampton County Asylum, Berry Wood, Northampton.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to Medical Superintendent.

Leyton, Walthamstow, and Wanstead Children's and General Hospital.—Resident House Surgeon. Salary £100 per annum, with rooms, board, and washing. Applications to James Bird, Secretary, The Hospital, Orford Road, Walthamstow, N.E.

Park Hospital for Children, Hither Green, London, S.E.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Clerk to the Metropolitan Asylums Board, Embankment, London, E.C.

Metropolitan Hospital, Kingsland Road, N.E.—Pathologist and Registrar. Salary £120 per annum. Applications to J. C. Buchanan, Secretary and House Governor.

The Hospital for Sick Children, Great Ormond Street, W.—Medical Registrar. Honorarium £200 per annum. (See advt.)

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Bungay (Suffolk), Clacton-on-Sea (Essex), Gillingham (Dorsetshire), Shefford (Bedfordshire), Willenhall (Staffordshire).

Bethlem Hospital.—Resident House Physician for six months. Complete board and washing, and an honorarium at the rate of £25 per quarter. (See advt.)

Births.

Barris.—On September 28th, at 50 Welbeck Street, W., to Dr. and Mrs. John Barris—a daughter.

Boulton.—At Rockcliffe, Mussoorie, India, to Major Harold Boulton, I.M.S., and Mrs. Boulton (*née* Maud Mary Garton)—a daughter.

MacDonald.—On October 3rd, at 4 Buckingham Terrace, Glasgow, the wife of Dr. David MacDonald (*née* Olive P. Agar), of a son.

O'Grady.—On October 3rd, at 52 Lower Mount Street, Dublin, the wife of Major Standish O'Grady, R.A.M.C., of a daughter.

Ridout.—On September 30th, at St. Elmo, Clarendon Road, Southsea, Hants, the wife of C. A. Scott Ridout, M.S., F.R.C.S., of a son.

Wilson.—On September 22nd, at 108 Chevening Road, Brondesbury, N.W., the wife of Thomas Wilson, F.R.C.S., of a son.

Marriages.

Bennett—Taylor.—On October 3rd, at St. Clement's Church, Ste. Madelaine, Trinidad, Richard Charles Bennett, M.B., C.M., of Palm Grove, Princes Town, Trinidad, W.I., to Rose Florence, elder daughter of Mr. and Mrs. G. W. Taylor, "Cliftonville," The Polygon, Southampton.

Mole—Holmes.—On September 30th, at St. Gabriel's, Warwick Square, S.W., Harold F. Mole, F.R.C.S., of 19 Mortimer Road, Clifton, elder son of the late F. M. Mole, of Westfield Road, Edgbaston, to Harriet (Hetty), youngest daughter of the late Reuben Holmes, of Heanor, Derbyshire.

Deaths.

Brown.—On September 30th, at 77 Fitzjohn's Avenue, N.W., William Carnegie Brown, M.D., M.R.C.P., aged 54.

Fairbank.—On October 3rd, suddenly, at Felixstowe, Caversham, Oxon., Frederick Royston Fairbank, M.D., F.S.A., aged 72.

Last.—On October 2nd, at Bletsoe, Littlehampton, Grace Bevington, beloved wife of Cecil Edward Last, M.R.C.S., L.R.C.P.Lond., and daughter of the late John Stephen Jarvis and Mrs. Jarvis, of 75 Addison Road, W.

Norris.—On September 29th, at 15 City Walls, Chester, Deputy-Surgeon General Nathaniel Norris (retired list), in his 83rd year.

Thorp.—On October 3rd, at 39 Henley Road, Ipswich, from pneumonia, Henry John Thorp, M.D., aged 81.

Walker.—On September 30th, in a Nursing Home, as the result of an accident, Henry George Walker, M.D., of 5 Marloes Road, Kensington, W.

OPERATIONS—METROPOLITAN HOSPITALS.

WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m.), London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopædic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9 30 a.m. and 2.30 p.m.), Gt Ormond Street, (9.30 a.m.), Gt. Northern Central (2.30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College (2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynæcological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopædic (2.30 p.m.), Soho Square (2 p.m.).

SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St George's (1 p.m.), St. Mary's (1 p.m.) Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. George's (2 p.m.), St. Mary's (2.35 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), Chelsea (2 p.m.) Samaritan (Gynæcological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopædic (2 p.m.), City Orthopædic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).

TUESDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Ear (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m. Throat, Golden Square (93.0 a.m.), Soho Square (2 p.m.).

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, OCTOBER 15, 1913. No. 16.

NOTES AND COMMENTS.

The Eternal Suffragette. SOME recent developments of the militant suffragette campaign deserve passing notice. Miss Lenton was last week committed for trial for maliciously setting fire to the tea pavilion at Kew Gardens in February last. The delay in the police court proceedings has been due to the state of her health. It may be remembered that she suffered from septic pneumonia as a result of forcible feeding. The first witness to tender evidence was a lady, one of the partners in the refreshment business carried on at the pavilion. The accused enquired of the witness, "Don't you think it would have been advisable to trade in your own name, that we might have known it was women's property?" The magistrate ruled that no answer was needed to so impertinent a question. It illustrates aptly the hopeless confusion of minds that have become criminal in their tendencies through sheer lack of intellectual training and of the restraining influence of a higher moral control. Well might the Mayor of Richmond say how deplorable it was to see a young woman (she is only 22 years of age) of great personal charms taking up a criminal movement and running the risk of committing suicide. Following the opinion expressed in these columns some time ago, he remarked that such conduct did not argue a rational state of mind.

The Hunger Strike. WHAT is to be done with these unhappy women who regard it as their duty to refuse food in prison? The intermittent imprisonment plan devised under what is known as the "Cat and Mouse Act," is far from satisfactory. Besides, why should its application be confined to suffragette offenders? A few days since the death was reported of a male prisoner, who had refused food. No attempt was made to feed him forcibly, so we gather, and he died of starvation. Why should he not have been released just as women are who refuse food? Clearly, our whole criminal system may be thwarted if the "hunger strike" becomes a common practice amongst criminals. There are rumours, however, that forcible feeding is to be resumed in the case of women offenders—just as it is carried out in the lunatic asylums. Why not? If society has to shut up individuals in gaols and madhouses, it must for the time being assume a certain responsible control over their welfare and see that they take their proper daily allowance of food, sleep and exercise. How can it stand by and permit prisoners to commit the further felony of *felo-de-se* without having something to say in the matter?

Militants and Medical Men. MILITANT suffragettes have turned their attention to members of the medical profession. At Holloway Gaol three of these misguided women waylaid the Deputy Governor and Medical Officer of the Prison, Dr. F. E. Forward. He explained to them that he was not responsible for the policy of forcible feeding. One of them, notwithstanding, assaulted him savagely with a sjambok, while the other two cut off his retreat. It is to be hoped that the perpetrators of this cowardly assault will be brought to justice. It seems that Sir Thomas Barlow incurred the anger of certain other ill-balanced viragos, who broke his windows in Wimpole Street. Several other houses were also singled out for attack, and the police in the Harley Street district have orders to keep a careful watch on suspected persons. If these foolish women deliberately take up arms against society, sooner or later their predatory warfare must end in melancholy disaster for each of them in detail and indefinite postponement of the female franchise. The patience of society has long been strained to breaking point. Social and political victories are no longer won by physical force. Women are inferior to men both in brains and in muscle, but less conspicuously so in the former. There could be no surer sign of degeneracy in womankind than the taking to fisticuffs.

A "Corner" in Radium. A RUMOUR is abroad to the effect that a company has been formed in London for the purpose of acquiring a radium monopoly. It is stated that negotiations are in progress between the Austrian Government and a British syndicate for the purchase by the latter of the Joachimsthal radium mine for £700,000, with the proviso that a specified percentage of the profits are to go to the Austrian Government. If the news be true, it affords an illustration of the greediness of capitalists who seek to pile up huge fortunes by "cornering" the necessities of life, such as flour, cotton, petroleum, and so on. Fortunately, so far as medical science is concerned, the value of radium has been grossly exaggerated. In spite of the vast sums of money that have been lavished upon its trial in the United Kingdom it is able so far to claim little therapeutical progress. Radium cures rodent ulcer, a fact that was early recognised: it relieves a few other conditions, but, generally speaking, it has proved a costly failure. So that even if the available supply of radium be kept in the hands of a few capitalists no great harm will have been done to suffering humanity. It may be, of course, that the future may bring its surprises with regard to the therapeutic virtues of radium, as it may with regard to many other agencies, whether presented by nature or begotten by the brain of man.

LEADING ARTICLES.

PARASYPHILIS.

IN recent years the interest of the medical profession in syphilis has been greatly stimulated by the many and startling discoveries that have re-written much of our knowledge of the subject. Of the various strongly marked characteristics of this disease not the least striking is that of latency, so that a man after apparent recovery may remain without symptoms for ten to twenty years or more, and then suffer from a tertiary attack in aggravated form. This potential latency, indeed, has long been the bugbear of the responsible medical man called upon to treat syphilis no less than the patient who seeks the service of his skilled directions. Gradually the term "parasyphilis" crept into medical practice. It was coined in order to denote in patients who had suffered from syphilis manifestations which could not be definitely termed syphilitic, but which occurred as a sort of syphilitic bye-product, which did not as a rule yield to antisyphilitic remedies; but which occurred with some amount of frequency in the shape of eruptions or "reminders," to use the apt phraseology of the late Sir Jonathan Hutchinson, or as definite nerve disorders, notably general paralysis of the insane and locomotor ataxy. The attitude of the medical profession during this period, in a word, was tentative and speculative, and it remained in that unsatisfactory condition until the introduction of the serum test of Wassermann revolutionised the diagnosis of syphilis. The blood of general paralytics and of tabetics was found to furnish evidence of syphilis in an overwhelming majority of cases. About the same time, or rather earlier, another epoch-making test was introduced, namely, the direct demonstration of the *Treponema pallidum* in the tissues of a patient. This latter test, however, was negative when applied to the parasyphilitics, including general paralytics and tabetics, as well as generally in tertiary lesions, where it was found rarely or not at all. Under these circumstances it was supposed that the deep cerebro-spinal syphilitic affections were in some way of toxic origin, or the results of processes started originally by the pathogenic organism or its products, while the specific spirillum had disappeared from the body. Some such view has been probably held by most medical men who have considered the subject of so-called parasyphilis within the last two or three years. Then came the announcement from America of an observation that has caused yet another quick change in our views. Professor Noguchi, director of the Rockefeller Institute, demonstrated the *Spirochæta pallida* in the brain of a tabetic. Coming from so distinguished a source, the fact has been accepted without question. Its consequences must be immediate and far-reaching. The illogical term parasyphilis, always a temporising confession of doubt and ignorance, will disappear from medical nomenclature. Henceforth a symptom or group of symptoms will be syphilitic or non-syphilitic; it will be no longer possible to relegate it to a no-man's region of parasyphilis. Then, again, it opens up a new hope for treatment of those terrible scourges of mankind, general paralysis and tabes, not to mention some forms of deafness and other syphilitic nerve troubles. If the cause of the progressive lesions be the *Spirochæta pallida* buried deeply in the nervous system, then it must be the task of the all-conquering scientist to find some way of bringing his germicide remedies to bear upon the noxious parasite in his remote retreat. Physicians will hopefully renew their attack on two of the most hopeless maladies they have hitherto been called upon to encounter. One interesting fact emerges from the kaleidoscope of changes that for the last eight years have characterised the history of syphilis. Mercury, the great specific drug in the treatment of the disease, still retains its place as an essential and efficient therapeutic remedy. In spite of the brilliant results obtained by salvarsan, its value is that of an ally and an adjuvant which does not do away with the need of mercury. At this particular juncture, when the conquest of syphilis has so suddenly been placed in the hands of medical science, it is a matter of peculiar interest to have in London Professor Noguchi, whose brilliant work has taught us how to cultivate the *Spirochæta pallida* in artificial media, to make luetin, and has placed on a new basis of scientific fact the study of latency and of the remote phenomena hitherto grouped under the name of parasyphilis.

CURRENT TOPICS.

The Cinematograph in Medical Education.

SOON after the introduction of cinematography it was recognised that this method of illustration could be applied with advantage to the teaching of practical medicine. A successful demonstration was given quite recently by Professor Stirling, in the medical school of the University of Manchester, upon some of the newer applications of cinematography to physiology. A series of interesting and instructive films were shown to illustrate the movements of microscopic animals by a method known as "dark-ground illumination," and to show the protoplasmic movements of amœbæ and of some animalcules which are propelled by means of ciliary motion. The circulating movements of the protoplasmic granules and chlorophyll granules within certain water plants were projected on the screen. The actual growth of the protoplasm of slime-fungi at the circumference of the organism, as well as the remarkable reversible movements in the protoplasm itself, and also the characteristic corkscrew-like movements of spirochætes, were well seen. The latest advance in cinematography, which is known as "Ultra-Cinematography," was illustrated. In this method the successive phases of movement are slowed down. Impressions of a movement, such as walking, running, or the flight of a bird, are taken at the rate of 180 images per second, and these images were projected in the ordinary manner—*i.e.*, at the rate of 16 per second. Illustrations of a man walking, running, jumping, and throwing a stone, as well as the flight of a pigeon, were shown by this method, so that the audience could analyse with ease the successive movements of the human limbs in locomotion, as well as the graceful movements of a pigeon flying freely in the open air. The beating of the heart in the open chest of an animal at its normal rate and during asphyxia was projected—the movements being slowed from ten to twenty times their normal speed so that the successive stages of these movements could be analysed by the unaided eye. The final triumph was reached by the demonstration of the process of leucocytic diapedesis from a piece of spleen removed from a developing chick which had been placed in a sterilised culture-medium and kept at 37° C. The possibilities of this method of education are enormous, for the student is brought face to face, as it were, with the "hidden mysteries of Nature and of Science."

Boric Acid in Sausages.

The self-contained cylindrical breakfast-requisite which forms such an appetising and, when accompanied by mashed potato, such a popular dish, very seldom appears in the courts. For, when well cooked, sausages are most nourishing, and they may be safely recommended as a wholesome diet for all except infants and gouty subjects. Like most prepared meaty foods, some care must be taken to see that only fresh ingredients are employed in their manufacture. Occasionally a moderate quantity of preservative may be necessary, usually boric acid, though this need not be excessive in amount. A farmer was summoned last week at Devonport for selling sausages mixed with boric acid in such a manner as to render them injurious to health. It was stated that the quantity of boric acid present was found to be 0.4 per cent., or 28 grains to the pound. An interesting personal testimony as to the harmfulness of boric acid was given by Professor H. R. Kenwood, who stated, in his evidence, that in 1903 he took ten grains of boric acid at two meals, morning and evening, for three days, and on the third day he suffered from the train of symptoms known to be associated with this drug and called borism—headache, loss of appetite, depression, and diarrhœa. He discontinued taking this drug and was well again in 48 hours. In 1905 he renewed the test, and it produced exactly the same symptoms on himself in three days, and on the morning of the third day, when he left off taking the drug, the symptoms disappeared and he was well in 48 hours. Owing to the fact that it was admitted that boric acid was one of the least harmful of chemical preservatives and that it was a general custom to add these to sausages, the defendant escaped with a nominal fine of ten shillings. The question of idiosyncrasy has always to be considered in dealing with poisoning by small quantities of a chemical substance, for it is quite possible for some people to remain absolutely unaffected after taking a few grains of boric acid which might cause serious illness in others.

Salvarsan in Anthrax.

An interesting case has been reported from Bradford, where many opportunities have occurred for the investigation of anthrax in the wool factories of the district. It appears that a worker named Rothera, æt. 26, contracted anthrax. He was taken to the Bradford Infirmary on September 21st, where three doses of Sclavo serum were administered. As he did not improve, 0.6 of a gramme of salvarsan was injected intravenously. He then improved rapidly, and on September 29th began to take ordinary food. On October 3rd, however, he vomited blood and died in the evening. Dr. Eurich, bacteriologist to the Anthrax Investigation Board in the Bradford District, said that he found the anthrax bacillus present in the lesions when the patient was admitted. A *post-mortem* examination revealed the existence of chronic Bright's disease. After death he failed to find any trace of the original anthrax bacillary infection. He added that the mortality after the Sclavo serum treatment was 9.0 per cent., against a former mortality of 75 to 80 per cent. in anthrax. The case is of great scientific interest as it points to the fact that salvarsan destroys the anthrax bacillus in the tissues. It is somewhat unfortunate that the patient suffered from chronic disease of the kidneys, as the results are thereby complicated. It is, of course, well known that the use of salvarsan is contra-indicated when there is serious organic disease present, and presumably it was not detected in the case of the Bradford patient. It is more than ordinary ill-luck that the case should have occurred in Bradford, as it will naturally prejudice future sufferers from anthrax from consenting to a trial of the drug. Lastly, from all this tragedy issues the fact that salvarsan appears to have cured anthrax when our only other available remedy had failed.

Flies as Carriers of Infection.

The crusade against flies still continues with unabated vigour. Only last week further reports on the investigations conducted at the instance of the Local Government Board into the question of the conveyance of infection by flies was issued. They contain valuable papers by Dr. Gussow on "*Empusa musca* and the Extermination of the House-fly," Dr. Copeman on "Hibernation of House-flies," Dr. Hindle on "Colour Preference of Flies" and "The Range of Flight of *Musca domestica*," and Dr. Graham Smith on "Non-lactose Fermenting Bacilli in Flies." The investigations are summarised by Dr. Arthur Newsholme, Chief Medical Officer of the Board, who expresses the opinion that they possess much general and scientific interest, and have important practical bearings. "The exact share borne by flies in conveying the infection of epidemic diarrhœa," he says, "cannot yet be stated. It would be a mistake, with our present knowledge, to assume that the problem of the prevention of this disease is limited to the destruction of flies. It is concerned also with the personal cleanliness of the mother who has to prepare the infant's food, and with the cleanliness of the house, the backyard, the court, and the street, from which infective material may obtain access to the infant's food, with or without the intermediation of flies. For practical purposes, however, the number of flies in the summer months may be regarded in towns as a valuable index, under present conditions, of the possibilities of contamination of food by pathogenic microbes or by decomposing organic matter, especially in districts in which privies and pail closets persist, and in which accumulations of house refuse or stable refuse are permitted." In Dr. Copeman's paper it is stated that the one specially interesting and unexpected point that emerges from the preliminary investigation into the question of hibernation is found in the fact that not a single specimen of the house-fly (*Musca domestica*) was met with among the considerable number of hibernating flies caught in situations which have hitherto been regarded as its special habitat. "This," he says, "may possibly be accounted for, in part, by the comparatively slight prevalence of the common house-fly during the summer of last year." The conclusion Dr. Hindle draws from an experiment regarding flies and colours is that under the conditions of the experiment flies do not display any marked colour preference, and it therefore seems unlikely that the adoption of any particular colour for the walls of houses and stables will have any effect on the number of flies entering them.

Careless.

The old story again. It used to be sponges, and now it is rubber gloves. Damages have been given against a surgeon for leaving a rubber glove as a *quid pro quo* for a tumour in a patient's abdomen. How it could be done we do not know. Anyhow, it was done. What seems to us rather hard is that positive negligence is punished so much more severely than negative, perhaps because it is much rarer. It is also more easily proved. Still, a man who misses an obvious and curable condition in an abdomen because he does not expect it escapes scot free, while his patient dies, and a comparatively innocuous clip is the cause of more trouble to the man who leaves it lying about than to its receptacle. Nearly everything has been stitched up in somebody, and many men now follow the advice of a famous surgeon who said it was a wise precaution to count one's nurses before closing the abdomen.

The Discovery of a New Vaccine for Gonorrhœa.

If it be true, as reported by the Paris correspondent of a daily newspaper, that the director of the Pasteur Institute in Tunis, M. C. Nicolle, has discovered a more efficacious vaccine for gonorrhœa, a notable advance will have been made in the therapeutics of our art. Hitherto all previous attempts in this special direction have been signalised by ill success, and yet Nicolle claims wonderful results, simply attained, by the vaccine he has discovered. He bases his claim upon two hundred cases, all of which were successful. Three or four injections, intravenous and subcutaneous, were made every two or three days, and cures resulted in less than fifteen days, all pain and discomfort ceasing after the first injection. It is impossible to overestimate the value of such a treatment if further investigation prove the stability of this discovery. The first invaluable advantage which its application suggests is that of the treatment of purulent conjunctivitis, in the child and in the adult, the former of which is answerable for at least 30 per cent. of the cases of blindness in the blind asylums of the world. Preventable as are the results of purulent conjunctivitis in infancy by skilled treatment in the present day, it is still a fact that, through neglect and other causes, the destruction of corneæ still continues by this means to prevail. We are convinced that this regretable fact is partly due to the absence of any standardisation of the treatment of the disease. Almost every ophthalmic surgeon has his own pet method of treating the gonococcal conjunctivitis of infancy. Thus a complexity of methods can only breed confusion in the mind of general practitioners, by whom the cases are first seen. On the other hand, were a standard line of treatment to be laid down, universally accepted and observed, and authoritatively enforced, the cases of loss of vision from this disease would soon become conceivably less. It is from this aspect that an added value would result from the discovery of a vaccine for gonococcal infections. The treatment of purulent conjunctivitis of infancy, of gonococcal origin, would at once become standardised, the confusion of treatment at present prevailing would cease, and every practitioner would have no hesitation in deciding as to the necessary course to pursue. Upon these and other grounds, therefore, in respect to gonococcal infections generally, we may only trust that M. Nicolle's discovery may prove to be *un fait accompli.*

Round the Circle.

The medical profession have from time immemorial believed in the curative powers of waters of natural mineral springs. Every physician had a pet resort, and to it he sent his patients. They came back better, and that was enough. The credit for the cure was given to the waters, for no special reason except that the sick man had drunk them. Then came Osler the iconoclast. He scared us with hot words, pointing out that artificial waters of identical composition with those that flow from the breasts of mother earth must have as effective therapeutic action as their prototypes. Are not Abana and Pharpar, if not better than, at least as good as, all the waters of Israel? This idea was so sensible that we believed it implicitly and still sent patients to Harrogate, telling them that it was not so much the drinking of the waters as the way the waters were drunk that mattered. Now we are back again where we began. When the Curies discovered radium many workers found traces of it in mineral springs. Then Ramsay showed that the wonderful properties of radium are due to the gas niton of which it contains 75 per cent., and further that the springs at Bath and many other places owe their value to the niton contained in their waters. So there we are for the present. We have looped the loop and are back at the point where we started. The field of knowledge is so vast and vague that almost all we can do is to get hold of some statement and prove it and its contradictory alternately. This whirligig action seems rather fruitless; but perhaps a screw propeller is a better and more hopeful simile. In addition to our obvious circling we have a less evident but ever present movement of advance.

Does Ozone Purify the Air.

Some interesting experimental work has been recently conducted by Drs. E. O. Jordan and A. J. Carlson, of Chicago, into the bactericidal and disinfectant action of ozone (*a*). Their results agree with those of Erlandsen and Schwarz, Hill and Flack, and others, with respect to the power of ozone in strong concentration to mask certain odours, such as those of asafœtida, oil of cloves, ammonia, musk, etc., which are certainly made less obvious by the presence of ozone. But in a concentration that masks a bad smell by its own intensive odour, ozone has been shown to cause irritation of the respiratory tract and also fatigue of the special olfactory sense organ. Some bacteria are killed by ozone, it is true, but practically this fact is of little importance, since a similar bactericidal effect could be obtained more efficiently by the use of formalin or some other familiar gaseous disinfectant. If ozone be, to some extent, a deodoriser, it would not be used as a disinfectant,

---

(*a*) *Journ. Amer. Med. Assoc.*, September 27, 1913.

but merely for the purpose of removing the sense of frowsiness in the atmosphere of a closed place. Various devices have been prepared for utilising on the large scale this "freshening" effect of ozone when newly generated, notably on one of the metropolitan "tube" railways. That the installation has had the desired effect no one will deny who compares the present state of the atmosphere in the stations and along the line with what it was before the system was adopted. It is not pretended, of course, that ozone wards off all disease germs, for that would be an extravagant claim which is unsubstantiated by laboratory tests. From the public health aspect it is worth bearing in mind that ozone may conceal faults in ventilation, while it is powerless wholly to correct or counteract them.

The Condition of Dublin.

The labour dispute in Dublin, with the acute distress which it has brought on the poorer classes, does not appear so far, except in the case of children, to have produced much effect on the health of the city. There has not, at any rate, been as yet any undue pressure on hospital accommodation. The incidence of disease and the mortality among children has been unduly high. At the end of a dry summer Dublin children always suffer heavily from diarrhœal diseases, disseminated doubtless by the flies which breed unchecked in the filthy streets, lanes, and courts of the poorer parts of the city. This year, however, there can be little doubt that these diseases are more widespread on account of the distress consequent on the labour troubles. We are glad to know that several of the special relief agencies are devoting themselves particularly to the care of the children, and are providing free dinners in the schools for needy children. It is more difficult, however, to reach the younger infants, among whom diarrhœa makes the greatest havoc. At the time of writing the dispute shows no signs of an early settlement, and the various relief agencies have more scope for work than funds to undertake it.

The Value of Leucocyte Extract in Erysipelas.

A study of the defensive mechanism of the human body has led bacteriologists more and more to devote their attention to the intracellular resisting agents of the blood and other fluids. The researches of Hiss, Allen, Guisser, Alexander Moore, and others show that extracts of leucocytes possess a valuable influence in patients suffering from various acute bacterial infections. Only three years ago Dr. J. G. Dwyer, of New York, published a report of six cases of acute infective processes in the ear, nose, and throat, treated by this means, and recently he and Dr. P. H. Hiss have recorded, in the *Medical Record*, the results of the use of leucocyte extract in erysipelas. The remedy was tried in 148 cases of all types and grades of severity. In every case there was a fall of temperature and a rapid improvement in the general condition following its use. The best effects were observed when the treatment was begun early in the course of the disease, the duration of which was generally shortened, working out to an average of three and one-tenth days. No stimulation was found to be necessary, the leucocyte extract keeping the patients quite comfortable, with a pulse-rate rarely above 90. The authors call attention to the beneficial effect of the extract in post-operative or surgical erysipelas, especially about the eye, ear, nose and throat. Mastoid wounds, for instance, were found to heal in a shorter time than in uncomplicated cases. The extract is prepared, under aseptic precautions, from the leucocytic sediment from the pleural exudate of rabbits which have received intra-pleural injections of aleuronat. The method seems worthy of trial, not only in cases of erysipelas, but also in many other acute infections.

As we go to press we learn with great regret of the death of Sir John Batty Tuke, U.D., D.Sc., M.D., the well-known alienist. We hope to publish a full obituary notice in our next issue.

PERSONAL.

Mr. R. Jones Evans, M.R.C.S.Eng., L.R.C.P.Lond., has been appointed Mayor-elect for Pwllheli.

Dr. Campbell Watt has been elected the first President of the newly formed South African District Surgeon's Association.

Dr. Arthur Deaker Owen has been appointed Medical Officer of Health for the Hampton-on-Thames Urban District.

Dr. John Henderson, M.D., Ch.B.Glasg., F.F.P.S. Glasg., has ben appointed Professor of Medicine in St. Mungo's College, Glasgow.

Dr. George Parker, M.D.Cantab., has been appointed Sole Lecturer in Forensic Medicine and Toxicology at the University of Bristol.

Dr. H. W. Catto, M.B., B.S., M.R.C.S., L.R.C.S., has been appointed Assistant Pathologist and Bacteriologist to the Island Medical Department, Jamaica.

It is announced that Sir David Bruce will leave England on November 1st for the purpose of concluding his sleeping sickness investigations in Central Africa.

Dr. F. M. Sandwith, Gresham Professor of Physic, will deliver the first of four lectures at the City of London School, Victoria Embankment, E.C., on Tuesday, October 28th, at 6 p.m.

Dr. Francis Warner, Consulting Physician to the London Hospital, will deliver the first of a course of lectures on "The Neuroses and Psychoses of Children," on Tuesday, October 21st, at 2 p.m., in the Clinical Theatre of the Hospital.

Sir Thomas Clouston, M.D., LL.D., will deliver the fifth Norman Kerr Lecture on "The Clinical Aspects of the Study of Inebriety" on Monday, November 3rd, at 4 p.m., in the Hall of the Royal College of Physicians, Queen Street, Edinburgh.

Mr. G. H. Makins, C.B., F.R.C.S., has been appointed a member of the Committee of Management of the Conjoint Examining Board of the Royal Colleges of Physicians and Surgeons in the vacancy occasioned by the retirement of Sir Rickman Godlee.

Dr. W. Wright Wilson, of Acock's Green, Birmingham, was the recipient the other day at a gathering of the Provincial Grand Lodge of Mark Masons of Warwickshire, held at Coventry, with a handsome symbolical jewel on his retirement, through ill-health, from the office of Deputy Provincial Grand Master of the Mark Degree.

The work of reconstructing the old operating theatre and of building the Etherington-Smith Memorial Ward for it, the whole forming a memorial to Mr. Etherington-Smith, Warden of the College and assistant surgeon, who died in April last, is now well in progress, and when completed will form a valua addition to the hospital equipment.

FRENCH CLINICAL LECTURE
ON
THE TREATMENT OF FRACTURES OF THE SKULL BY LUMBAR PUNCTURE AND EARLY TREPHINING.

By PROFESSOR LEON BERARD, M.D.,

Surgeon to the Hotel Dieu, Lyons.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

I HAVE already discussed with you in connection with concussion, contusion and compression of the brain, the immediate treatment to be instituted in traumatism of the cranium: complete rest in the horizontal position, warmth, the administration of cardiac tonics, especially by the subcutaneous injection of diffusible stimulants such as ether, caffeine-serum, camphorated oil and so on; careful disinfection of the scalp, as well as of the natural cavities of the face, especially if the traumatism be an open one, and in presence of loss of blood or cerebro-spinal fluid or actual brain substance. In man the scalp should be close shaved. In women, with closed traumatisms we may hesitate to insist upon the sacrifice of this ornament, but unless we do so it will be very difficult to make out the little hæmatomata, the painful spots, the little depressions and the ecchymoses symptomatic of fissures of bone. Pray do not allow a question of æsthetics to weigh in the balance when your patient's life may be hanging by a thread, and if you really have serious reason to suspect fracture of the skull take all necessary steps and have the head prepared as for operation.

On this occasion I shall deal only with fractures of the base of the skull. Even more frequently than with fractures of the vault of the skull fractures of the base not accompanied by any visible wound or depression may fail to be recognised on a first examination. It is only possible to be certain of the existence of this lesion soon after the receipt of the causal injury in rare instances—in fact, only when there has been evacuation of cerebro-spinal fluid *viâ* the nose or ear. The other signs only amount to a probability, the probability being the greater the more of these signs are present. They only supervene later on, in succession, with intervals of hours or even days. To begin with, there is otorrhagia and epistaxis which only possess a diagnostic value when persistent, copious and recurring or when accompanied by escape of cerebro-spinal fluid. Now the escape of this fluid can only be detected after the hæmorrhage has ceased, and the same remark applies to the subconjunctival ecchymosis which comes on in from 36 to 72 hours after the receipt of the injury. Symptoms of paralysis of the cranial nerves may be delayed until the third or fourth day showing steadily increasing pressure upon nerves.

Now, this period of latent or slight symptoms is the most dangerous one of all. When the victim of the accident has escaped the rapidly fatal effects of bulbar concussion and extensive contusion of the brain, he is still exposed to the risk of death, or, at any rate, of grave disturbances, by rapidly progressive compression of the brain consequent upon intra- or extra-dural bleeding, by absorption of the blood in hæmolysis which will irritate the nerve centres and, lastly and especially, infection of these centres and their meninges starting from the places where the fissure traverses the nose, ears, etc., which are always sources of infection.

It is therefore of the greatest importance to make a trustworthy diagnosis as soon as possible, and to institute adequate treatment. Of all the means of investigation which allow of a rapid diagnosis and suitable treatment of fractures of the base, one of the best, one on which the greatest hopes are founded, is exploratory lumbar puncture. Tuffier and Milian proclaimed that this puncture always gave issue to blood-stained fluid in cases of fracture of the base. When made some hours later the fluid may be merely yellowish or pink, the latter being due to blood pigment. Culture of this fluid would enable us to tell whether or not there was infection of the fracture and therefore of the meninges. Tuffier, however, had already called attention to the possibility of blood finding its way into the needle and so into the fluid during puncture, hence he advised collecting the fluid in three portions and making sure that the three specimens all presented the same reddish or pink colour. He even added that there might be fracture without coloration of the fluid if the bleeding happened to be slight so that a negative result did not absolutely dispose of the possibility of fracture having taken place.

In 1902, Boutier, of Paris, selected this as the subject of his thesis, and arrived at the conclusion that this method of exploration could not be relied upon to furnish early, trustworthy proof of the existence of such fractures, because a fracture might have taken place without any coloration of the fluid; also because the fluid might be blood-stained in the absence of fracture in cases of cerebral contusion and intra- or extra-dural hæmorrhage The elements of blood may even be present in cerebro-spinal fluid apart from traumatism, as, for instance, when in cerebral hæmorrhage the blood finds its way into the ventricle, also in cerebro-spinal meningitis.

It follows that the presence of blood in the cerebro-spinal fluid only possesses a diagnostic value when other symptoms all point to the same conclusion. According to Boutier, puncture is only indicated in cases of injuries to the head, accompanied and followed by loss of consciousness or delirium in respect of the causation of which no information is forthcoming.

We have shown that this sign is not certain, neither is it early. After even extensive fractures of the base the meningeal hæmorrhage is usually not very free and the blood may not find its way into the fluid for from 12 to 36 hours. With regard to prognosis, Boutier does not think that there is any necessary relationship between the gravity of the traumatic lesions and the depth of coloration of the cerebro-spinal fluid, but he admits that bacteriological examination of the fluid does enable us to ascertain whether or not the fracture is infected.

It is not only in fracture of the base that lumbar puncture gives inconstant results. Henschen and Lenormant have pointed out that, in opposition to what we might anticipate, grave cerebral contusion, extra-dural, or even intra-dural effusion of blood may exist without any coloration of the fluid. Everything depends upon the freedom of communication between the sub-arachnoid spaces and those of the brain and cord.

Are we, then, to conclude in favour of abstention from lumbar puncture in traumatisms of the cranium? Certainly not, because, when done with proper aseptic precautions, it is practically free from danger, and though it may leave us in doubt as to the precise lesion when the fluid is blood-stained, the withdrawal of several cubic centimetres of fluid almost always determines improvement in the patient's state. For instance, the coma promptly clears up, the violent headache and restlessness quiet down in a few hours, because the puncture has relieved the pressure of the blood-laden fluid in the subarachnoid spaces, or because it arrests irritation of the nerve centres by effused blood.

Muret advises puncture as early and as often as may be required, every two or three days for a week or two, taking care to avoid too sudden decompression. As a rule the quantity withdrawn is from 15 to 30 cc. Of nine cases of fracture of the skull in Quénu's wards nine recovered.

Chiarugi, of Sienna, claims that lumbar puncture almost always yields positive results by revealing the presence of blood-stained fluid, and he holds that it is an excellent means of diagnosis in slight cases with ill-marked symptoms. As a means of treatment it is valuable because in slight cases the first puncture puts an end to the vertigo and headache, while in fracture it relieves the intra-cranial pressure, decomposes the nerve centres and favours consolidation of the bone by preventing blood and fluid being forced through the fissures. In cases where surgical intervention is indicated previous lumbar puncture improves the pulse and respiration.

In opposition to the sturdy advocates of lumbar puncture, there are surgeons who deny that it can have any decompressive or antiseptic action, and urge that in any case its action is very fugitive. When frequently repeated it necessarily exposes the patient to some risk of infection, and, on the other hand, it cannot act directly on the hæmatoma which is pressing upon the brain. Cushing, and Vincent, of Algiers, at about the same date (1908) advocated treating all cases of fracture of the base by trepanation and drainage, because even when they appear to be closed these fractures are in reality open since they communicate with the nasal and ear cavities which are always more or less infected.

Vincent advocates this treatment, especially as a means of averting meningo-encephalitis by allowing the microbial elements and toxins in the bony focus to escape as they are formed instead of multiplying in a closed cavity. In June, 1912, Vincent brought forward eight cases thus treated, all of which recovered.

Trephining is naturally more efficacious when performed early, as soon as the effects of the concussion have passed off, or even during this period should the shock be prolonged with presumptive signs of fracture of the base. If the injured person is in coma no anæsthetic is required, provided we previously raise the blood pressure by an injection of caffeine in normal saline solution or of camphorated oil. It may, however, prove the means of obtaining unhoped-for recoveries even after two or three days when meningo-encephalitis is apparently already in being, to judge from the restlessness, the contractures, the stiffness of the neck and the rise of temperature. This is also the case when the existence of encephalo-meningitis is confirmed by puncture giving issue to a turbid fluid under pressure containing polynuclear cells and microbes.

I, too, could relate cases of recovery after trephining for fracture of the base operated as late as the fourth day in presence of meningo-encephalitis, but I am fain to admit that in several cases early trephining did not avert a fatal result, either because my intervention was not on a sufficiently large scale or because I only operated on the fractured side. We must bear in mind that one of the elements of gravity in these cases, especially after grave injury or falls from a height, is extensive, deep contusion of the brain which *per se* may determine irreparable lesions of the brain and medulla culminating in rapid death, trephining or no trephining.

To sum up, then, I would advise that in all cases of fracture of the base, obvious or only suspected, lumbar puncture should be performed with the usual precautions, never withdrawing more than 30cc. of cerebro-spinal fluid. Whether the fluid be red or not, if there be a copious discharge of blood or cerebro-spinal fluid from the nose and ears, with other signs of basic fracture, such as paralysis of the facial or external oculo-motor nerve, especially when the circumstances are such as to allow of trephining under surgical conditions, then we ought to perform free, bilateral, subtemporal trephining with drainage of the subarachnoid spaces. Failing this intervention, puncture is to be repeated as often as the symptoms seem to require (headache, stertor, somnolence and extension of the paralysis). We must bear in mind, however, that puncture, even when effectual, is at best of ephemeral benefit. Useful, no doubt, in relieving disturbances due to concussion and slight contusion, it can do nothing to mitigate the compression effects of free hæmorrhage, nor can it be relied upon to cut short meningo-encephalitis already in being.

A few pessimistic words in conclusion. Every person who has sustained an injury of the skull, whether he recovers, with or without operation, whether he gets well soon or drags along a tedious convalescence, must be looked upon as a fragile subject, whose professional capacity will nearly always be diminished. Remember that there are intra- and extra-dural hæmatomas which, after an interval of quiescence of from two to ten months may, in the course of a few days, determine fatal compression should the subject not be within reach of a surgeon. These patients require to be kept under observation, and they must be urged to take it easy for some time to come. After the expiration of the period of temporary incapacity that of tertiary, post-traumatic troubles is only beginning, and it will extend far beyond the three years set apart for possible revision under existing legislation. At any moment we may be confronted by disastrous developments, as trying to the surgeon as they are menacing to the patient.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Arthur E. Giles, M.D., B.Sc., F.R.C.S., Surgeon to the Chelsea Hospital for Women; Gynæcologist to the Prince of Wales's General Hospital, Tottenham. Subject: "Pessaries versus Operations in the Treatment of Uterine Displacement."*

We are requested to announce that the demonstration of the parasite of rabies and of the cultural researches upon spirochætes by Dr. Hideyo Noguchi, of the Rockefeller Institute, New York, which was to have taken place on Monday last, has been unavoidably postponed until Monday, October 20th, at 5.30, at the Royal Society of Medicine, 1 Wimpole Street, W.

The new King's College Hospital, at Denmark Hill, S.E., which was formally opened by the King in August last, was opened for the first time on Monday for the reception of casualties.

ORIGINAL PAPERS.

STATUS LYMPHATICUS IN ADULTS, ITS CLINICAL DIAGNOSIS AND IMPORTANCE. (*a*)

By HAVEN EMERSON, M.D.,
New York.

At the present time our knowledge of the condition recognised as status lymphaticus, or as it is more commonly called by German writers—status thymico-lymphaticus, is not based on ætiology, but upon physical characteristics.

It is not essential to the pursuit of clinical studies that we should have a theory of the disturbed physiology, which determines the abnormal physical individual, nor yet await the complete understanding of the separate or mutual functions of the various secreting tissues, before we admit the relation of the clinical findings to health and disease. What is important for the internist, and for the eugenist, is the recognition of a type of individual whose physical peculiarities seem to bear an important relation to his mortality, in certain infectious diseases, and to his susceptibility to some of the deteriorating influences which modern society tolerates or suffers from. This recognition of a type of person, who may not appear less healthy or less capable than the rest of society, is at present based wholly on physical examination, one may almost say, on inspection alone.

Inspection of the human body provides us with physical signs of health or disease upon which we rely. The value of physical signs, in relation to health and disease, depends upon the constancy of association of the observed facts during life with a definite series of findings after death. If the physical examination reveal constantly certain variations from the usual, or the accepted normal, and if the *post-mortem* examination reveal a constant series of gross and microscopical abnormalities in a tissue or groups of tissues, then where these two sets of observations are noted in a high per cent. of cases among those dying of certain of the infectious diseases, we may presume that there is some causal relation between the physical findings and the mortality of such individuals. From the time when Paltauf (1889-90) pointed out the pathological symptom complex of status thymico-lymphaticus, pathologists have more and more generally verified his observations and in some instances have added to the data he gave in defining the condition found *post-mortem*. When Neusser (1911) gave an equally clear description of the clinical picture of status thymico-lymphaticus, an impetus was given to observations by the internists, to test their skill in establishing a reliable clinical diagnosis with the possibility of its bearing upon the prognosis or treatment of various diseases. Having watched the cases of meningitis, typhoid fever, and septic infections in the general medical wards of Bellevue Hospital die apparently in a high per cent. of cases when they showed the physical marks of status lymphaticus, and having noted at the autopsy table the constancy of pathological findings which confirmed the clinical description of such cases, I wished to test the reliability of the various criteria given for the recognition of a characteristic or classical case of status lymphaticus.

The material upon which this study was based was at my disposal while attending the alcoholic wards at Bellevue Hospital in New York. These wards receive patients suffering from the toxic effects of alcohol and of other narcotic drugs, cases of attempted suicide, and sick prisoners. Among the admissions are often to be found border-line cases, which on further study prove to be psychopathic cases rather than toxic individuals of normal mentality. One thousand cases were studied, five hundred consecutive male admissions in July and August, 1912, and an equal number in January and February, 1913.

The record of each patient consisted of the following points:—

Age; country of birth; cephalic index, based on the occipito-frontal and biparietal diameters; the colour and physical qualities of the hair of the head; the amount of hair upon chin, the upper lip, on the chest in front, in the axillæ, and the amount and distribution of pubic hair; the amount of faucial, lingual, and pharyngeal lymphatic tissue, observed by inspection and digital palpation; the presence of palpable cervical, axillary, and inguinal lymph nodes; the shape and proportions of the neck, thorax, abdomen, thighs, and upper arms; the details of the external genitals; the general nutrition; the presence of congenital anomalies; the clinical diagnosis.

Of the 1,000 cases examined, 780 were without any stigmata or physical characteristics which would mark them as abnormal.

Two hundred and twenty showed most, if not all, of the physical attributes sufficient to identify them as cases of status lymphaticus.

Analysis of the records of these two groups shows certain facts.

As to age it was found that 18.63 per cent. of the status cases were under 30 years, while but 9.66 per cent. of the normal cases were under 30 years. Above the age of 30 the distribution of the status and the normal cases showed such slight discrepancies as to lead to no conclusions. The cases ranged from 19 to 84 years.

As to nationality or race the variations in the two classes were negligible. Eighteen nationalities were represented.

As to cephalic index, if we use the term dolicho-cephalic to represent an index of 80 or less and brachy-cephalic for an index of over 80, we find that the cases of status are almost equally divided, while the normal cases show a preponderance of 7 per cent of dolicho-cephalics.

	Status Lymphaticus.	Normal Cases.
Dolicho-cephalic,	49.14 per cent. ...	53.63 per cent.
Brachy-cephalic,	50.86 per cent. ...	46.37 per cent.

In noting the colour, texture (*i.e.*, fine or coarse), lustre, curliness or straightness of the hair of the head, no differences of any importance were noted; the beard was noted as being scanty in 9.87 per cent. of the normal cases, but scanty or wholly lacking in 57.22 per cent. of the status cases. Similarly it was found that the moustache was scanty in but 7.94 per cent. of the normal cases, but scanty or lacking in 55.90 per cent. of the status cases. Sternal or anterior thoracic hair was found to be scanty in 41.15 per cent. of the normal cases, and scanty or wholly lacking in 89.54 per cent. of the status cases. The axillary hair was scanty in 13.45 per cent. of the normal cases, but scanty or absent in 65.45 per cent. of the status cases. The pubic hair was found to be of the feminine type (*i.e.*, arranged transversely and not rising towards the umbilicus but ceasing abruptly above the pubic region) in 13.20 per cent. of the normals, and in 95.90 per cent. of the status cases. The faucial, lingual, and pharyngeal tonsillar tissue was found increased in amount in the normal cases in 6.66 per cent, 26.02 per cent. and 4.48 per cent.

(*a*) Paper read in the Section of Medicine before the International Congress of Medicine, London, 1913.

respectively, and in the status cases in 7.27 per cent., 23.18 per cent. and 0.90 per cent. respectively; not notable differences except in the case of the pharyngeal tonsils. Even though the pharyngeal tonsil seems to be enlarged five times as often among status cases as in normal men, the percentage of incidence is too low to use for diagnostic purposes.

The case of the superficial lymph-nodes is somewhat similar, for although the cervical, axillary, and inguinal nodes are found palpable in somewhat higher proportion of cases in the status individuals than among normals, the occurrence of such palpable glands is so common as to allow of no diagnostic application of this point. In normal cases the cervical, axillary, and inguinal glands were palpable in 15.25 per cent., 33.33 per cent., and 53.71 per cent. of cases respectively, and among status cases in 25.90 per cent., 41.81 per cent., and 55.90 per cent. respectively. The neck was noted as long and slender in 32 per cent. of normals and in 36.81 per cent. of status cases—an unimportant difference. The thorax was found long and narrow in 27.94 per cent. of the normal cases, and in 44.09 per cent. of the status cases. The contour of the abdomen as to its roundness or flatness showed no difference worth noting between the two classes. The thighs were noted as rounded in 30.52 per cent. of the normal cases, and arched in 13.97 per cent. of the normal cases, while in 75.46 per cent. of the status cases they were rounded and in 50 per cent. were arched. These terms, rounded and arched, are used to express the impression made by the difference between the masculine and feminine types of thigh, the rounded as contrasted with the flat thigh being characteristic of feminine physique, and an outward and forward bowing or arching being a feminine attribute as distinguished from the straighter masculine thigh. In the case of the upper arm it was found that 25.76 per cent. of normal cases were described as having rounded arms, while among the status cases there were 75.90 per cent. with this feminine characteristic. Among the normal cases the penis was noted as small in 22.56 per cent., while this was the case among the status cases in 51.83 per cent. The glans penis was noted as small in normal cases in 26.03 per cent., and in status cases in 54.54 per cent. The shape of the glans was described as pointed or acorn-shaped in normal cases in 32.05 per cent., and in status cases in 61.31 per cent. There were no undescended testicles among the normal cases, but there were six cases or 2.7 per cent. found with undescended testicles among the status cases, 4 with both undescended, 2 with 1 undescended. The size of the testicles was noted as small in 24.74 per cent. of normal, and among the status cases in 45.90 per cent.

As to general nutrition there were no differences of any moment.

Congenital anomalies were found in 0.25 per cent. of the 780 normal cases, and in 3.63 per cent. of the 220 status cases.

Complicating medical affections in addition to drug addiction were found in 3.58 per cent. of the so-called normal cases, and in 10.40 per cent. of the status cases. 94.4 per cent. of all cases were admitted for alcoholic intoxication.

To summarise the data obtained from these examinations, it may be said that 22 per cent. of the particular class of men representing chiefly the alcohol and narcotic drug habitués, show sufficiently striking variations from the usual masculine physical habit to be classed as cases of status lymphaticus; that, of the points usually noted in arriving at a diagnosis, the ones found to be constant enough to be entitled to consideration are, scantiness or absence of hair on lip, chin, and in sternal and axillary regions, together with the feminine type of distribution of pubic hair with or without scantiness of pubic hair; a tendency to narrowness and length in the thorax; a noticeable roundness and arching of the thighs, and roundness of the upper arms; small size of penis; smallness and pointed shape of glans penis and smallness of the testicles.

In addition, there is a physical character noted in a very large proportion of the cases, and present almost invariably when the points above summarised are also present—namely, a particularly velvety or fine and delicate texture of the skin which is seen and felt to be almost wholly free from the usual short hairs to be found commonly, for instance, upon the thigh in men. For lack of such terms as would accurately designate this quality of the skin, I have not made a record of its appearance in the cases above reported, but I wish to call attention to this as an important diagnostic point.

Of the points described by others as commonly noted in cases of status which I find of little or no value in arriving at a diagnosis are, the physical characters of the hair of the head, which is supposed to be commonly coarse and straight in status cases; the faucial, lingual, and pharyngeal lymph tissue, which is supposed to be commonly increased; the superficial lymph nodes, which are supposed to be felt in a high proportion of status cases; the slender columnar neck and the rounded feminine abdomen which are reported as being usual in status. In addition there is a point, described by European observers, which I have so regularly failed to make on physical examination of status cases, and which has so little foundation in the experience of the pathologists at Bellevue Hospital, that I have not made it a part of my records—namely, the spleen. The spleen is supposed to be large in status. This I do not find to be the case. I am permitted by the Director of the Pathological Laboratory to quote from the forthcoming hospital report the results of autopsy records of status since 1905. Of the 3,600 autopsies, 288, or 8 per cent., were cases of status lymphaticus. Of these 288 cases 29.66 per cent. were recessive cases, as shown by microscopical as well as gross study of the lymphatic tissues of the body, and 70.33 per cent. were active cases. Twenty-six of the 288 cases (or 9.20 per cent.) were not associated with other demonstrable lesions as a cause of death.

Two hundred and sixty-two (or 91.08 per cent.) were associated with other lesions. Of these 262 cases, 242 were associated with infectious diseases. Epidemic, purulent, or tuberculous meningitis, typhoid fever, lobar pneumonia, acute and chronic pulmonary and general miliary tuberculosis, acute and chronic cardiac infections, septic infections of a variety of origins.

It is to be particularly noted that of the autopsied cases of typhoid fever 23.07 per cent. were status. Of acute infective endocarditis 19.51 per cent. were status, and of epidemic cerebro-spinal meningitis 48.27 per cent., while of the autopsied cases of lobar pneumonia 2.96 per cent. were status; of tuberculous meningitis 3.80 per cent. were status; of acute and chronic pulmonary or general miliary tuberculosis 4.50 per cent. were status.

In arriving at a pathological diagnosis at *post-mortem* the essential points to be observed in addition to those accessible to the clinician during life, are the gross and microscopic appearance of the blood-vessels, particularly the aorta, which is small, soft, and elastic; the intestinal lymph adenoid tissues, the Peyer's patches and follicles, and the mesenteric lymph nodes which are uniformly found enlarged; either a hyperplasia of the lymph follicles of the spleen in active cases, or fibroid tissue tufts which have replaced previous hyperplasia of the lymph follicles in the recessive cases; enlargement of the thymus gland out of proportion to the age of the subject in active cases.

It is true that percussion and possibly X-ray examination will, in the hands of a few, elicit the presence of an enlarged thymus in children, but the likelihood of this decreases with every decade of the patient's age above the first. By deep digital palpation in the episternal notch the normal aorta can usually be appreciated at each systolic impulse, and this is rarely the case in status cases, owing to the small size of the aorta, but this is of little reliability in arriving at a diagnosis.

For the present it seems to me that a diagnosis of status lymphaticus is justified, when we find, in the case of a man, a decided scantiness of hair on chin and upper lip, scanty axillary and sternal hair, scanty or feminine distribution of pubic hair; the slender thorax; rounded contour of upper arms and thighs with an arching of the latter; hypoplastic external genitals, particularly if associated with cryptorchismus; and a delicate velvety skin. The diagnosis is further confirmerd if we find hyperplasia of the lymph tissue of nose, throat, and tongue and an increase in the palpable cervical and axillary lymph nodes.

If we admit the justice of such a diagnosis, because of the confirmation of a sufficient number of cases verified *post mortem*, of what service will this prove in the practice of medicine?

The obvious and justifiable conclusion at present is that such individuals are more susceptible to the dangers of infectious diseases than are normal people. To avoid for such people by all precautions, especially by artificial immunisation, as for typhoid, diphtheria, and meningitis, every chance of infection, is our evident duty. They are poor risks in an epidemic, and the prognosis for them, when they are infected, is more serious than for normal men. As they have passed the particular dangers of their state during childhood, by especial care or good fortune, so, during maturity, they are among those who cannot be expected to survive, as well as normal men, extreme fatigues, shocks, loss of blood, abuse of narcotic drugs, or surgical procedures. Those physicians whose hospital experience is mainly with people of the upper walks of life will undoubtedly find that the incidence of status lymphaticus is far below the figures I have presented here for alcoholic patients. And in the general medical wards of Bellevue Hospital, which receives almost exclusively the pauper class, the incidence is less than a quarter of that found among alcoholics.

Among psychopathic cases, particularly those who suffer acute alienation in the first three decades, the incidence of status is, I believe, even higher than among the cases I have reported above.

It should by no means be understood from this that all cases of status lymphaticus are undesirables socially, as they may be physically less capable in the struggle for existence than their fellows, for it is in the experience of all who observe these cases that there are among them leaders in scientific and artistic professions, and men of the highest standards of character.

For the identification of status lymphaticus among women we rely upon the peculiar character of the skin of the body and extremities, the scantiness of the axillary hair pad, the scantiness of pubic and perineal hair, hypoplasia of the genital apparatus, and particularly slender thorax and extremities. Some women of decided status conformity have a marked growth of hair on the face and upper lip. As has been pointed out by Paltauf, Bartel, and others, the status cases among women are in a high percentage of cases subject to the dangers of pregnancy and the puerperium. With this addition, what has been said of male status cases applies equally to women.

While we await the embryological, or physiological, explanation for this particular physical habit (lymphatismus, hypoplastic constitution, constitutional inferiority, status thymico-lymphaticus, or status lymphaticus), there is much which the clinician is equipped and particularly fitted to discover as to the relation between status lymphaticus and the incidence and course of various pathological states.

In closing, let me gratefully acknowledge my debt to Dr. Charles Noris, Director of the Pathological Laboratory at Bellevue Hospital, who was the first in the United States to recognise the clinical picture of status lymphaticus in adults, and place its diagnosis upon a sound basis for clinician and pathologist. Without his experience and records of the past seven years I could not have prepared this paper.

SHOULD THE STATE INSTITUTE A NECROPSY IN EVERY CASE OF DEATH? (a)

By J. C. McWALTER, M.A., M.D., D.P.H., LLB.

WHAT happens when we write a certificate of the cause of death? We make a statement of fact—or supposed fact—that a certain person died on a certain day—and a statement of opinion—that he died, say, of heart failure or cerebral hemorrhage. The statement of fact may be quite erroneous—we do not, in fact, guarantee that the man is dead—we certainly are not compelled to ascertain the fact of death. This is bad enough in a document which is taken seriously; but what is the value of the "opinion as to the cause of death"? The practitioner gives it, of course, to the "best of his knowledge and belief"; but he certainly has not "knowledge" of the cause of death, and in most cases his belief is vague, wavering and unsubstantial—if not quite conjectural. In the certificate the practitioner makes eight statements of fact—only one of which may be within his knowledge—and that one statement is so hazy as to be worthless.

Thus you say, in the certificate, "I hereby certify that I attended"—but when? You are supposed, probably, to have attended him in his last illness—but what does that mean? You may have seen a man six months before his death, suffering from tuberculosis or heart disease. You think it highly probable he may since have died of the disease—it is possible that his last illness was tuberculosis or heart trouble, and that you were the last practitioner who saw him—but, surely, your certificate will be a mere guess if you give it.

Again, you state—"I last saw him ——" This is really the only part of the certificate you can make a clear statement about, but you are not asked to say whether you saw him alive or dead.

Further, you say "that he died," adding, perhaps, "as I am informed." Clearly you are not prepared to state the fact of death in a certificate of its "cause." We had in Dublin not long ago an instance in which a doctor gave such a certificate. On the strength of it the death was duly registered and insurance money drawn. The alleged corpse complained at the wake that he did not get his proper share of the proceeds, and the case came into the courts.

(a) A Paper read at the International Congress of Medicine, in London, August 13th.

Another statement of fact you make is that he died on such a day. Obviously, if you are not sure of the fact of death it is futile to specify its date.

Again, you state he died "at——," but you may never have been in the house. You, perhaps, saw the patient at the dispensary, or in your surgery, or elsewhere. He may have died in the street, or in another house.

Then you have to express your "knowledge" as to the cause of his death—of which, by hypothesis, you have no knowledge at all, as well as your belief not only in the cause of death, but in the duration of his illness. You may be completely at a loss to know of what the man really died, you may have seen him but once, but you are bound to put down some cause or other.

To show how certain practitioners regard this document a case may be quoted which occurred in London during the current month. A certain doctor certified the cause of death as chronic rheumatism, whereas it seems to have been a well-marked case of tuberculosis. His reason was that he took the word of the relative, having forgotten about the case. "People say anything to get a certificate," said he in excuse. "The mere fact of something being on the certificate, which is not a medical report, does not mean that he had got that complaint."

The whole edifice of preventive medicine—which probably now costs £24,000,000 a year—the whole basis of the treatment of disease in 40,000,000 of British people—is based on deductions drawn from certificates made up in this manner, and sent on to the Registrar-General's Departments.

We know that the value of statistics from death certificates is further impaired—if possible—by the fact that in a large proportion of cases no medical practitioner has been in attendance. A further large proportion are worthless from various symptoms, as dropsy, hæmorrhage, convulsions, etc., being reported as causes of death.

My ignorance may be denser than that of most practitioners of medicine, but I may be permitted to quote my own experience. I find that I have signed in my time considerably over a thousand death certificates. I have no special reason for doubting that these persons were really dead—but not in two per cent. of the cases did I see the dead body. Not in ten per cent. of the cases did I visit the patients—they mostly called at my surgery. In all these cases there were not more than ten autopsies—and in most of the cases where an autopsy was performed my diagnosis was wrong.

Now, the returns of the Registrar-General are made up of my thousand of supposed causes of death—perhaps wrong nine times out of ten—and of the various thousands of "causes" of other practitioners. But of what value are deductions based on instances which may be more often wrong than right?

I brought this report before the Berlin Health Congress, and suggested that 80 per cent. of certified causes of death were probably erroneous. Sir Clifford Allbutt, who was in the chair, requested an American doctor who was a delegate to the Congress, to give us the benefit of his experience in that Continent. This gentleman, who had an official post in this connection, stated that in America it was considered that what a man died of "was his own affair," but he thought that to suppose that 20 per cent. of death certificates were accurate was probably 50 per cent. too high an estimate. It seems they do things better in France. Bertillon has been at pains to draw some useful inferences as to the causes of disease by comparing the British Death and Disease Tables with the French. It appears that the British tables, in completeness and convenience, have many advantages. This is only departmental work, which we may assume is well done, but if the documents on which all our statistics are based are so loosely written, conjectural and inaccurate as not to represent realities, all the care of the Registrar-General's department, and all the money spent on it, are in vain.

The Paris method is this—A certain number of doctors in each quarter are recognised officially to certify deaths. When a death occurs of which no official information is otherwise available, one of these doctors is notified by the police to attend and ascertain the fact and cause of death. For this he gets a fee of three francs. If there appears to be a necessity for a *post mortem* examination other steps may be taken. Obviously the French are on the road to correct statistics.

Dr. W. A. Brand has recently commented on the drawbacks of the Coroner's inquest. It need not be denied that its defects are many. It is not a court of justice, but it has all its defects. It is in practice bound by rules of evidence which often prevent the discovery of facts. In practice it is a preliminary inquiry—not to find the cause of death, but to find who was to blame. Most of its time is taken up in the discussion of questions which arise under the Workmen's Compensation Act, or in some effort to impose a liability which the other side repudiates. The actual pathological condition which gave rise to death is almost overlooked and obscured in such a welter of opposing interests, but, after all, our knowledge of the cause of death would be much more incomplete were it not for an occasional Coroner's inquest.

Do I, then, advocate that the State should institute a necropsy in every case of death? Certainly. It is the only possible means to ascertain what people really die of. If we do not know what people die of we cannot hope rationally to prevent or treat disease. The Insurance Act gives every person a vivid financial interest in the prevention of disease. Such questions are not merely for the medical societies—they are table talk, train talk, town talk.

It will be said that the current of public opinion will be against mutilation of the dead. It may be thought that more education is still needed—but public opinion will rapidly come round. The last service that any of us can do for our fellow-men is to deliver our bodies to the interest of science and humanity. The public is now infected with an active anxious desire to know what each person dies of—whether it could have been cured, and whether the doctor can be blamed. A mother or father of a family will soon be reconciled to a *post mortem* examination of a child if doubtful points as to its disease can be cleared up. Insurance societies will clamour for reliable data as to the incidence of disease—for they have suffered greatly for want of trustworthy statistics.

When I speak of the State instituting an examination of the cause of death, I do not advocate a system of State examinations. The ordinary attendant might be compelled to state the fact and cause of death, and he should have power to make such a necropsy as seemed necessary—due regard being had to people's feelings.

The services of expert pathologists should be available where required, and these might very well receive a Government subsidy. Where the friends could not pay, a small fee should be available for the official death certificate. In Paris, as we see, the sum paid is three francs.

An immense uplifting would be given to the practice of medicine by any such system of certification. Men could no longer defer a diagnosis and treat the patient symptomatically; they should ever be keen and alert, knowing that any blunders would be sure to be made known. The benefit to the community would be even greater, and pathological science would be enormously enriched. Medicine, at length, would cease to be a mere juggle with the patient.

SOME NOTES ON
ARTHRITIS DEFORMANS,
WITH AN ANALYSIS OF FIFTY CASES TREATED BY MEANS OF CONTINUOUS COUNTER-IRRITATION.

BY W. J. MIDELTON, L.R.C.P., M.R.C.S.

IN the following record of cases it will be found that females predominate to the extent of 39 to 11.

The approximate commencement occurred between the ages of 10-20, 1; 20-30, 11; 30-40, 12; 40-50, 11; 50-60, 13; 60-70, 2. Forty-four have been placed under the heading of rheumatoid arthritis, six osteo-arthritis. Personally I find some difficulty in a number of cases in drawing the line between them, and I agree with the view that the most reasonable distinction is between joints which are merely affected by the toxins of micro-organisms and products of imperfect digestion, and those in which the actual germs themselves have invaded the joints and are causing destruction of cartilage and hypertrophy of the edges of bones.

The subject is still so much a matter of conflicting theories, I prefer to refrain from expressing decided convictions, except that I firmly believe in all cases the toxins responsible for the disease have invaded the brain, spinal cord, and their membranes, and set up changes that lead to a train of symptoms such as:—muscular wasting, cramps, local asphyxias, anæmias, etc. Even the joint changes, I believe, are partly due to impaired nerve influence. The views of Ord, Senator, Spender, P. W. Latham, Ll. Jones Llewellyn, C. J. Macalister and others on this point are well known.

For this reason I always bear the nervous system well in mind when treating these maladies, and employ as the title indicates, continuous counter-irritation in the neighbourhood of the spinal cord.

There are three principal methods of carrying this out:—

1. The blister, followed by savin ointment.
2. Acu-puncture, with counter-irritant drugs such as cantharides, croton-oil, methyl salicylate, oil of mustard, etc.
3. The actual cautery. For this I prefer the galvano-cautery.

I consider the first two the most efficacious on account of the exudation which takes place. The third is good and has the merit of rapid and cleanly application, no dressing being required. All three may be applied with advantage to the joints, as well as to the spinal cord.

The objections raised by those who have no real practical experience of the remedies are, in my opinion, grossly exaggerated. If carefully carried out the pain and discomfort are very slight, and not to be compared to that experienced after many surgical operations. Patients of all ages have undergone treatment by one or other method, or a combination of any two or all three. Some have been extremely feeble, and yet a real disaster has still to be recorded as being due to either as far as I know.

I have found it difficult to understand on what grounds the danger of cantharides carefully employed externally is based. Personally I have never seen any sign of serious impairment of the kidneys in any of my cases in which this has been done. A few have complained of temporary strangury, but this has been readily relieved. Such comparative trifles should not weigh against the great benefits that undoubtedly follow the use of these remedies. It is doubtful if any others offer superior advantages, not excepting vaccines; certainly not in advanced cases.

The *technique* is simple, and although bacteriological investigations, blood tests, etc., may be advantageous in some ways, they are not essential. Let me say, however, that no medical man should treat cases by such means until he has been carefully instructed in their use, and has familiarised himself with certain apparently trifling and yet very important details, otherwise it is not fair to the patients or the remedies. Moreover he should not presume to express a decided opinion until he has treated at least ten cases strictly in accordance with the rules laid down and for a sufficient length of time. I lay great stress on this point. Great patience and perseverance are necessary. I worked hard over one case for more than a year before any really satisfactory result could be shown. Now I am glad to say the improvement is obvious to anyone. Some sceptics say that in such a case the patient got well anyhow, and the remedy had little to do with it. I can only say I do not think so, and the notes of cases appended should go far to prove the value of these methods. In the majority of cases blistering the spine was relied on principally. I prefer not to use the word cure, they are therefore divided into four classes.

1. *Greatly improved,*—*i.e.*, a practical disappearance of all troublesome symptoms, and the acquirement of ability to lead an active life. Twelve.
2. *Much improved.* The pain, swelling, cramp, etc., gone. Ability to use the limbs with sufficient power to carry on household duties, business or pleasure not involving great or prolonged muscular exertion. Nineteen.
3. *Distinctly improved.* General health restored, able to walk a little, use the hands in conveying food to the mouth, move the head freely, etc. Thirteen.
4. *No improvement,* applies chiefly to muscular power and the movement of joints. The general health is almost invariably improved. Six.

The patients, with few exceptions, have come to us after having been treated for years by such means as natural spa waters, baths of many kinds, massage, electricity, exercises, ionisation, residence in Egypt, etc., without lasting benefit. Whereas by means of the blistering or Pyonex treatments patients may be kept going from bad to good and from good to better instead of drifting from bad to worse.

Although dating from remote ages, the revival of these remedies actively, and the present modifications, are comparatively recent; nevertheless I have had the opportunity of watching several cases during long periods, and have noticed them in better health and more active from 2 to 5 years after first being seen and treated by me. No matter how wasted and helpless they may be, it is worth while giving them the benefit of these remedies. Joints apparently ankylosed may become supple, muscles wasted to mere shreds enlarge and become more powerful, veins narrowed down to threads enlarge and become more prominent, attenuated bones thicken and become less brittle, harsh scaly skin may become supple and smooth. Sleep, appetite, digestion and the action of the bowels improve. Pain of all kinds, even headaches, either goes or is greatly relieved. This applies also to cramps, local sweatings, asphyxias, anæmias, morbid flushings, etc. In several instances the power to perspire has returned after having been lost, in others pigment has returned to a marked degree to grey hair and the hair has become abundant. Local discharges from the ears, nose, etc., often greatly diminish or disappear without active local treatment. Urines loaded with urates become clear and may remain so as long as these remedies are kept up and even for years after they have been discontinued if a sufficiently prolonged course has been carried out.

Even when actual pyorrhœa alveolaris exists, I am of opinion a patient would do well to have a course of continuous counter-irritation before extraction is resorted to.

VACCINES.

I am aware that much has been done recently with suitable vaccines; my experience of this form of treatment is small, but my opinion so far is that the results may be at times very good. Nevertheless there is a good deal of uncertainty and a considerable amount of risk attending their use, especially in the hands of a novice.

Thyroid.

Continuous counter-irritation may be depended on to act very beneficially alone in a large proportion of cases, but I feel strongly that thyroid extract does much good as an adjunct. The dose must vary with the needs of each patient. One grain of the ordinary dry extract a day is sufficient for some. Patients taking it should be warned not to exert themselves for at least an hour after the dose; if only one a day is being taken it should be at bedtime. Massage is positively dangerous in acute cases; in any case it is best applied to muscles only, and very lightly at first.

Surgical procedures should be postponed until the disease process has been largely arrested. I have noticed adhesions, softening and intra-articular pads and fringes lessening purely as the result of improved function during treatment by continuous counter-irritation. It is now an established fact that the internal secretion of the thyroid has the power of softening adhesions, and pathological fibrous tissue of any kind, if it is abundant and of good quality. It follows as a matter of course that if the general health is improved as a whole, the thyroid gland becomes healthier and its secretion more abundant and of better quality.

At a meeting of the West London Medico-Chirurgical Society on April 12th, 1912, I expressed the view that patients suffering from arthritis deformans should not be encouraged to exert themselves, as is too often done, and that the breaking down of adhesions should be postponed until the patient had undergone a prolonged course of treatment with a view to arresting the progressive disease process. That no known treatment is invariably successful in accomplishing this, I am well aware.

Dr. Preston King, of Bath, agreed with me, and said that the breaking down of adhesions in the early stage of treatment had been abandoned in the Mineral Water Hospital as a barbarous practice.

Moreover, at any stage, great care must be exercised in doing this, and I emphatically state that few medical men are sufficiently expert to accomplish it really successfully without damage to the parts around the joints in some way or other. Bones have been broken, muscles torn, and acute inflammation set up in the joints by over zealous, improperly trained and inexperienced operators. It should also be strongly borne in mind that these patients are weak generally and as regards the nervous system in particular, therefore such manipulations may cause great shock. They should never be carried out except under full anæsthesia, and I find C.E. perhaps the most useful anæsthetic, say one of ether to two of chloroform. I speak from practical experience.

In addition to notes of my own cases I have included others kindly sent me by my friends Drs. S. Gurney Champion and A. Brook Batley. To them I tender my grateful thanks. The following have been selected as fairly typical.

I. *Greatly Improved.*—Female, æt. 32, married. Polyarticular, including jaws and cervical spine. Bedridden, helpless, very depressed mentally; unable to move hand or foot; skin harsh and scaly; greatly emaciated; feet and legs cold and "dead." Pyorrhœa alveolaris, purulent nasal catarrh, muco-purulent cervicitis uteri and vaginitis. Dyspepsia, insomnia, much constant pain. Duration over 3 years. Much previous treatment in hospital and out at Bath, Buxton, Bournemouth, &c. Said to be hopelessly incurable by several medical men. After four courses of spinal blistering patient became plump and active, able to do all her own housework. Subsequently medically examined at Buxton, Cambridge, and at a meeting of the Bournemouth Medical Society. Pronounced practically cured.

II. *Greatly Improved.*—Female, æt. 42, married. Rheumatoid, polyarticular, including temporo-maxillary. Bedridden, helpless, melancholic. P. 120. Temp., 100-101°; knee jerks plus, myotatic irritability. Pigmentation of skin; Raynaud symptoms; asthma. Greatly emaciated. Endo-cervicitis uteri. Duration over 3 years. Had tried all usual forms of treatment under experts in London and elsewhere. Blistered twice. February, '06—May, '06. Regained complete health and activity. Gained over 3 st. in weight. Asthma, melancholia and cervicitis cured. Iodised phenol applied to cervix uteri. Quite well when heard of four years later.

III *Much Improved.*—Female, æt. 58, single, cook. Polyarticular knees enormously enlarged; emaciated; loss of weight, 4 st. Always much pain, especially on movement. Calves, 12 ins. round. Duration over 4 years. All kinds of treatment previously. Spinal blister twice. Regained normal weight. Calves grew to 15 ins. round. Pain much less; sleep, appetite, and digestion restored. Had not retrogressed at end of 4 years.

IV. *Much Improved.*—Male, æt. 62, married, merchant. Polyarticular; very helpless; walked 200 yards with difficulty; barely able to write; unable to dress or undress without assistance Duration over 2 years. Spinal blistering once, also knees once. Result: Able to walk over a mile with comparative ease, write well, dress and undress unaided, and in much less pain.

V. *Distinctly Improved.*—Female, æt. 54, married Polyarticular; constant lumbar pain; at times quite helpless. Duration, 20 years. Impairment of sight and hearing. Spinal blistering once. Regained much muscular power, resumed laundry work; pain in back only occasional and much less. Sight and hearing much improved.

VI. *Distinctly Improved.*—Female, æt 60, widow. Polyarticular; knees osteo-arthritic. Emaciation; much loss of muscular power; very melancholic. Duration over 8 years. Spinal blistering twice. Emphatic in statements of improvement. Able to do housework with comparative ease. Much less depressed, much less pain.

VII. *No Improvement.*—Female æt. 55, window. Polyarticular; knees osteo-arthritic; much pain; mucous colitis; feeble digestive power. Spinal blistering twice. Patient denied herself necessaries, in fact, half starved herself to be able to give money to a dissolute son. Died.

VIII. *No Improvement.*—Male, æt. 62, married. Polyarticular including jaws. Quite helpless. Cerebral disease, not definitely diagnosed. Double optic atrophy, loss of sight outer half of both eyes. Spinal blistering twice. Died suddenly. No *post-mortem*. Probably cerebral hæmorrhage.

I have extensive notes of most of my cases and shall be glad to send further particulars to anyone interested.

THE PLACE OF BACTERIOLOGY AMONG THE SCIENCES. (a)

By JAMES RITCHIE B.Sc.Oxon., M.D., F.R.C.P.Ed.,

Professor of Bacteriology in the University of Edinburgh.

At the outset Prof. Ritchie referred to the benefactor to whom the University owed the foundation of the Chair of Bacteriology. Robert Irvine was born in 1839, he said, and early showed leanings towards chemistry, which he studied under Professor George Wilson. Devoting himself to the technical side of the subject, he was associated for the greater part of his life with one of the great Edinburgh firms. His contributions to technical subjects were considered of high value, and were on several occasions singled out for distinction by the learned societies to which they were communicated. His leisure was equally dominated by the spirit of inquiry, and his house was the centre of a scientific coterie. In Irvine there was a personality which appealed to his friends. Generous, courteous, kind, often self-depreciatory, but holding inflexibly to what he considered right, he was one of those rare souls whom none could decry. It was fitting that that day they should think with regard of one who wished the University well.

Beginnings of the Science.

The science of bacteriology, Professor Ritchie continued, had not yet attained its jubilee. Its beginnings were in the middle of the nineteenth century, when such questions as the nature of fermentation, the possibility of the occurrence of spontaneous generation, and the infectiveness of such diseases as tuberculosis were engaging attention. Its history was associated with three great figures—first, that of Pasteur, who showed conclusively that yeast was the cause of fermentation, and that putrefaction was due to bacterial action; secondly, Lister, who founded the antiseptic system on Pasteur's work on putrefaction, thus riveting the attention of the world on the part played by bacteria as originators of human suffering; and, thirdly, Koch, who in his work on anthrax furnished the first proof that the multiplication of a bacterium in the body originated a disease. From this date modern bacteriology started, for in his investigations Koch had substituted for the previous elaborate and imperfect *technique* simple and efficient methods for the isolation and growth of bacteria. The effect of Koch's work was that during the next ten years the connection of bacteria with most human infections, including tuberculosis, diphtheria, typhoid fever, cholera, and blood poisoning in all its forms, was established. While the contributions of bacteriology to medicine were the earliest, many other human interests had been benefited. Industries connected with food preservation had had their conditions revolutionised. Further, the enormous importance of the beneficent action of bacteria had emerged. Such primitive procedures as butter and cheese making had been placed on a new basis, and in agriculture it was now known that bacteria played an important part in the fertilisation of the soil. When he turned to consider the place to be assigned to bacteriology among the sciences, the dominant factor was that historically it came into prominence through the light it shed on infectious disease, and if it was borne in mind that nearly one-half of the deaths which occurred were due to infection, it would be realised that the disease-producing bacteria were the most important of all micro-organisms. Bacteriology was thus essentially a branch of pathology. The study of the pathology of infection had revealed the process to be a reaction in which the invaded body did not play a passive part, and this had led to important practical results, of which the introduction of the antitoxin treatment of diphtheria was an example. Bacteriology also came into close relationship with physiology, as the investigation of the properties of the body fluids in immunisation against infection had important relationships to what occurred in health.

(a) Abstract of the Introductory Lecture delivered at the opening of the Winter Session at the University of Edinburgh. Oct. 7th, 1913.

Results of Research.

Even the failures of bacteriology had had an effect on kindred sciences. Hitherto no bacterial organism had been proved to be the cause of such diseases as measles, smallpox, and hydrophobia, but the combined efforts of bacteriologists and proto-zoologists had been directed to the problems, and during the past few weeks the cultivation of a new type of parasite from hydrophobia and from infantile paralysis had been announced. As a branch of scientific therapeutics, bacteriology had diminished the death-rate in diphtheria, typhoid fever, and perhaps even in tuberculosis. Preventive sanitation had been given a rational basis, and the possibility of killing bacteria which had invaded the body, and which was the dream of many of the early workers, might any day become an accomplished fact. In a University curriculum bacteriology must be realised to be essentially a post-graduate study, to be engaged in by the man of parts who looked forward to occupying a foremost position in the practice of medicine, or as a specialist in sanitation, or in the public services—above all, by the man of originality whose ability made him capable of making original contributions to knowledge. The position of the subject in Edinburgh University was unique. It was known to be Mr. Irvine's prime desire to encourage original research, and this intention the University had loyally resolved to carry out, so that the function of the Chair was primarily to foster inquiry, and only secondarily to be an instrument of instruction. The carrying out of such a programme involved a heavy responsibility. For its success two conditions must be fulfilled. One was adequate financial provision. The old motto, "We cultivate learning on a little oatmeal," was for science now a dead letter. The Rockefeller Institute of New York, one of the great bacteriological laboratories, had an endowment of over a million and a half sterling. Was there a Scottish Mæcenas who was ready to give the University of Edinburgh the opportunity for which she was waiting? If there was, there would be little difficulty in fulfilling the other condition—namely, the provision of a band of talented workers who would be ready to take advantage of the opportunity and carry on the traditions which had already placed the Edinburgh School in the foremost rank.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Resection-extirpation of Right Half of the Thyroid.—Mr. Berry operated on a girl, æt. 16, who had been admitted three days previously suffering from a swelling in the neck. For fifteen months she had experienced difficulty in breathing, which occurred even when she was sitting still. During the same period she had a swelling in the lower part of the front of the neck, which had increased in size during the last two or three months. This swelling had been painless. The throat had often felt rough and sore, and the patient had had difficulty in swallowing solid food, and in a lesser degree in swallowing fluids. About a year ago the girl had been given iodine to paint on the swelling.

On examination, there was a uniform enlargement of the whole thyroid gland. The enlargement was not very great in any part, and was painless, uniform and fairly soft. No pulsation of the gland could be felt, and the whole swelling moved on swallowing. It extended backwards under the sterno-mastoids on both sides, downwards to the clavicle, and upwards to the upper border of the thyroid cartilage. By examination of the throat the tonsils were seen to be enlarged. The patient did not seem nervous; there was no exophthalmos and no tremor. The pulse was rather rapid, heart, lungs and temperature normal.

Mr. Berry said that the operation was undertaken for parenchymatous goïtre on account of the difficulty of breathing. He pointed out that in these young cases the trachea was somewhat softer than usual and more easily compressed, especially when the goïtre lies low down. Open ether anæsthesia was slowly and carefully brought about, and at no stage of the operation was the patient at all deeply under. Mr. Berry pointed out that if the dyspnœa is very severe no anæsthetic at all is given; he has practically given up chloroform for these operations.

The usual collar incision was made, care being taken to keep it in the line where a necklace would be worn so that the scar could be hidden if necessary in future life. The incision extended through the skin and platysma, both of which were turned up together in a flap reaching as high as the hyoid bone, care being taken not to wound any of the anterior jugular veins. All bleeding points were immediately secured with pressure forceps; the last were left on. The infra-hyoid muscles were separated from one another, and were then cut across between clamps high up on the affected side near the hyoid bone. The gland being thus thoroughly exposed, the muscles having been pulled back, it was drawn forward by a curved director placed under the superior thyroid vessels, these last being clamped and doubly ligatured; many small vessels on both sides were also secured and clamped, as also the main inferior and middle thyroid veins on the outer side. The lobe was then rolled outwards and the pedicle cut through from the inner side, branches of the inferior thyroid artery being secured by forceps which were left on, and the gland removed. The vessels on which clamps had been left were now secured one by one with very fine silk ligatures. The patient, who at this stage was very lightly under the anæsthetic, was induced by tickling the pharynx to strain in order to test the efficacy of the hæmotasis.

Mr. Berry pointed out the necessity of securing every vessel, even to the smallest vein, lest recurrent venous hæmorrhage should take place. The total amount of blood lost during the whole operation was well under half an ounce. The infra-hyoid muscles were sewn up, and a glass drainage tube left in, the the skin and platysma being joined with catgut.

Mr. Berry said the treatment after operation would be a pint of saline by the rectum immediately; the patient would be placed in a sitting position in bed after two or three hours, and she would be allowed to get up on the following afternoon. The drainage-tube would be removed the following morning.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Clinical Section.

Meeting held Friday, October 10th, 1913.

The President, Mr. Charters J. Symonds, in the Chair.

EXHIBITION OF CLINICAL CASES.

Dr. J. D. Rolleston exhibited a case showing the value of salvarsan in the local treatment of Vincent's angina. It was that of a man, æt.20, who was admitted to hospital on August 2nd, 1913, certified to be suffering from diphtheria, on the seventh day of the disease. The fauces were slightly injected. From a dirty deposit on the right tonsil numerous Vincent's organisms were obtained. Throat cultures taken on admission and on each of the two following days showed absence of diphtheria bacilli. No antitoxin was given.

On August 3rd, a well-marked ulceration of the right tonsil was present. In spite of various local measures successively adopted—viz., application of methylene blue powder, syringing with a solution of potassium chlorate and lavender, and painting with tincture of iodine, the ulceration spread on to the palate and uvula, which became œdematous and covered with a dirty slough. There was considerable sub-maxillary adenitis. The throat became increasingly painful, and there was some difficulty in swallowing and pain in both ears.

On August 17th all other treatment was omitted and a throat swab moistened with glycerine was dipped in salvarsan powder and rubbed all over the affected area. The application was not painful, and within four hours the throat felt much easier. Subsequently three more applications of salvarsan were made. The slough entirely cleared off and the adenitis subsided. Vincent's organisms disappeared from the smear. On his discharge on August 30th only a very small opaque area was visible on the uvula, and within a week the throat became perfectly normal and has remained so since. Although the local discomfort was considerable, there was no constitutional disturbance, the urine was free from albumin, and the temperature was normal throughout his stay in hospital, except on the day of admission, when it was 99° F. There was no history or evidence of syphilis, and Wassermann's reaction (August 17th) was negative.

Mr. G. H. Makins showed a case of actinomycosis of the cheek treated by parenchymatous injections of formalin. The patient, a boy, æt. 17, was admitted into St. Thomas's Hospital in January, 1913. Two months previously an alveolar abscess had developed in connection with some carious teeth. The abscess was incised, and shortly afterwards a hard, brawny swelling developed in the right cheek. On admission, this swelling occupied an area of about the size of a half-crown piece. It was bluish-red in colour, very hard, and firmly fixed to the surface of the maxilla. Four discharging sinuses were present, and on examination of the pus exuding from these the streptothrix of actinomycosis was discovered.

During the month of February iodide of potassium, beginning with 5-gr. doses, rapidly increased to 20 gr., were administered internally three times daily. On February 21st two hypodermic syringefuls of 4 per cent. formalin solution were injected around the periphery of the indurated area and into the margins of the area itself. The injection was followed by considerable swelling of the cheek and lower eyelid. A second injection was made on April 4th, after which all the sinuses closed. Meanwhile considerable diminution occurred in the extent of the induration.

Further injections were made on April 22nd, May 30th, and July 16th. Each injection was followed by considerable local œdema which rapidly subsided, after which the indurated tissue became less in extent and freely movable upon the maxilla. The injections were necessarily made around the circumference, since the fluid could not be freely forced into the indurated area.

When exhibited the cheek was nearly normal, the only fixed spot corresponding with the cicatrix of the largest of the sinuses present when the formalin treatment was commenced.

Mr. T. H. Kellock showed a case of complete destruction of a part of the diaphysis of the tibia by acute osteomyelitis. The boy, æt. 8, two years ago had a sudden acute illness associated with much pain and swelling of the left leg below the knee. An operation was performed and some bone removed. Several months later a second operation was performed. The wounds had quite healed. There was considerable mobility between the upper and lower ends of the tibia.

A skiagram showed that the epiphyses were present and there was some attenuated bone leading from them, but for a considerable space there was complete absence of bone in the situation which the shaft of the tibia should occupy. The fibula appeared to be unaffected.

Mr. Kellock also showed a case of osteogenesis imperfecta with multiple fractures. The patient was an orphan boy, æt. $11\frac{1}{2}$. He was breast-fed for nearly three months. It could not be ascertained whether any deformity was present when he was an infant. He did not walk until he was four years of age, and was said not to have talked until six months ago. There were five brothers and sisters, all of whom were said to be healthy.

The child presented marked deformities of the long bones; the tibiæ and fibulæ were markedly bowed forwards; the femora were curved; the humeri showed marked thickening about the bicipital groove. Some of the epiphyses, especially those at the wrists, were enlarged.

Skiagrams showed the long bones to be more translucent than normal, and to show comparatively little compact tissue. Spontaneous fractures were seen in the tibiæ, radii, and ulnæ, with practically no displacement of the fragments. Wassermann reaction was negative.

Dr. W. Essex Wynter showed two cases of splenic enlargement, hæmorrhage, anæmia, with oral sepsis. (1) A man, æt. 50, had severe epistaxis in May, 1913. He went to hospital, and the teeth were attended to after the bleeding had been stopped. On August 10th there was sudden pain below the left ribs; the spleen was found enlarged, and when admitted to hospital on August 20th it extended to within $1\frac{1}{2}$ inches of Poupart's ligament, and 2 inches beyond the umbilicus in the middle line. It was firm and not then tender. The heart and lungs were normal.

On September 10th sudden and severe pain occurred over the spleen, with subnormal temperature, vomiting and collapse. Friction could be heard over the organ, which was apparently the seat of an infarct. A similar case occurred two days later, but less severe, and no friction could be detected. On September 18th severe and persistent epistaxis occurred, which was only arrested by plugging the nostril. On September 25th this recurred with less severity, both attacks being preceded by severe headache. No lesion of the mucous membrane could be detected. A blood-count showed a gradual decrease in the number of red and white cells (from 25,000), an increasing proportion of lymphocytes, and a raised colour index. The urine contained 0.3 albumin per cent., but was otherwise normal. The teeth were much decayed, had been entirely neglected, and there was extensive pyorrhœa.

In Case 2 arteritis obliterans also occurred. It was that of a woman, æt. 55, who had suffered for twelve months with attacks of pain in the toes and fingers, and a month ago submitted to amputation of the left second toe for moist gangrene; about the same time the third toe on the same foot was affected with dry gangrene. Ten months ago there was slight uterine hæmorrhage. The patient continued at work as housekeeper, though feeling weak and tired. On August 20th to August 22nd last, severe hæmorrhage from the nose and mouth occurred, the loss of blood being estimated at two pints. Previous health had been good.

On admission to hospital on August 25th, the skin exhibited a waxy pallor. The spleen, which was hard and not tender, could be felt two inches below the costal margin, and there was slight enlargement of the liver with similar characters. The abdomen was lax and no free fluid existed in the cavity. A hæmic murmur could be heard over the præcordia, otherwise the heart and lungs showed no physical signs. Partial dentures were worn over numerous stumps and the gums were in a very septic condition. Wassermann's reaction was negative. The blood-count showed anæmia, with a leucocytosis of 38,400 and a lowering of the colour index.

Sir **Frederic Eve** showed a case of angioma of the synovial membrane of the elbow. Girl, æt. 11. One year and nine months ago the elbow became swollen and painful, and she was laid up with it for a fortnight. The swelling was attributed to a blow on the part two or three years previously. Since then the elbow had become swollen every few weeks.

When exhibited there was a bluish bilobed swelling on the outer side of the head of the radius; the swelling disappeared on raising the arm; after applying an elastic ligature to the upper arm it stood out prominently and the circumference of the limb at the site of the swelling increased by ¼ in.

The exhibitor said that he had drawn attention to this condition in a paper in the *Clinical Society's Transactions*, 1903, xxxvi, p. 204, and described two cases of angioma involving only the synovial membrane, and two others implicating also the surrounding muscles. The chief interest of the condition lay in the diagnosis from localised tuberculosis of the synovial membrane. This might usually be made by observing the changes in the swelling induced by alterations of the venous circulation. Angiomata of synovial membrane often gave rise to a good deal of pain, increased by exercise. There might be tenderness, limitation of movement, wasting of muscle, and two of the writer's cases complained of starting of the limb at night.

Sir **Frederick Eve** also showed a case of Bazin's disease. The patient was a woman, aged 31. The trouble began as a hard swelling on the outer side of the left leg which broke down and discharged. An abscess formed, which gradually spread. When Sir Frederick Eve first saw her in March, 1913, there were two thin oval cicatrices on the outer side of the lower third of the left leg. At the lower end and outer margin of these cicatrices was a rim composed of irregular pit-like ulcerations covered with flabby granulations. The general appearances were those of a serpiginous ulcer. There was also a very small ulcer on the inner side of the same leg.

The patient appeared perfectly healthy, and a Wassermann reaction was negative. The ulcerated areas were excised and skin-grafts were applied. At the same time the affected part was exposed to the X-rays. As a result of this treatment complete healing took place. Later a few pit-like ulcers reappeared, but they healed after applications of pure carbolic acid and fomentations of 1 in 5,000 watery solution of biniodide of mercury, and she returned home. About three weeks subsequently the small ulcer on the inner side of the left leg broke down again, and a sore appeared on the right leg. Small areas of the margins of the scars on the outer side of the left leg also broke down.

While in hospital she had been treated by X-rays and had been kept in bed.

Mr. **Percival P. Cole** showed a case of tumour of the thigh in a man, æt. 45, who had fractured his right femur on February 10, 1913, at the junction of the middle and lower third. Considerable shortening and deformity followed, but owing to the patient's cardiac condition it was deemed inadvisable to plate. He was treated on a Hodgen's splint for a few days, but pressure sores began to develop, and extension apparatus had to be abandoned. He was discharged eleven weeks after admission. An excessive amount of callus had been thrown out and union was not complete.

He was re-admitted on September 25th. The swelling of the right thigh had gradually and painlessly increased, showing a circumference of 22½ in., as against the normal 14¾ in. The swelling was elastic and semi-fluctuating, feeling like a tense cyst. Exploratory incision was made under spinal anæsthesia, when some mucoid gelatinous fluid escaped. The tumour was composed of soft, jelly-like material, with spicules of bone embedded therein. This bled freely and surrounded the bone ends, which could just be felt. On microscopic examination it was found to be a myxo-chondroma.

Dr. **Arthur F. Hertz** and Dr. **W. Johnson** showed a case of bilateral atrophy of the face. The patient was an Italian, æt. 38, who presented himself for weakness of the right side of his face, complaining that the right eye closed incompletely during sleep. His face showed a well-marked condition of atrophy on both sides, especially the left. The cheeks were extremely hollow, and the tissues covering the bones of the face were very wasted. He showed well marked signs of chronic lead poisoning with great weakness of all the extensor muscles of the wrists and fingers of both sides. He had a blue line on his gums and was very constipated; he had had numerous attacks of abdominal colic. He showed no other signs of disease of his nervous system; the reflexes were all normal.

Mr. **H. Gardiner** showed a case of neuropathic arthritis of the wrist in a man æt. 42. The right thumb was wounded by a splinter nine weeks ago. A good deal of pain and swelling occurred, the swelling reaching half up the arm. This quickly subsided, but left the wrist-joint swollen but painless.

The right wrist was swollen and contained fluid. There was a dorsal dislocation of the wrist-joint, easily reduced. The joint was quite disorganised with osteophytic changes and rough grating. It was entirely painless and the muscular sense was diminished. Sensation of heat and cold was also absent. Tactile sensation was affected to a slight degree. There was some scoliosis that had been present for many years.

Mr. **Gardiner** also showed a case of bilateral cervical ribs in a girl æt. 17. She complained of slight weakness of both hands, noticeable chiefly when stretching big chords on the piano. The weakness had been noticed for three to four years. On examination very little abnormal could be detected in either hand, but the thenar and hypothenar eminences were not so well marked as one would have expected. X-ray examination of the neck showed the presence of bilateral cervical ribs, very well developed.

Dr. **H. D. Rolleston** and Mr. **E. F. W. Grellier** showed a case of unilateral clubbing of the fingers due to an axillary aneurysm. It occurred in a man, æt. 63, whose serum gave a positive Wassermann reaction. No difference in blood pressure or pulse tracing could be demonstrated between the two radial arteries.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

Opening Meeting held October 3rd, 1913.

Abstract of the Presidential Address by Mr. A. Ernest Maylard, M.B., B.S.Lond.,

ON DILATATION OF THE STOMACH.

Dealing first briefly with the normal stomach, Mr. Maylard referred to the development of the organ, which went on rapidly during the first year of life and then more slowly till full growth was reached in the third decade. Abnormal growth might result in an unusually large stomach, or diminished growth in an unusually small one, apart from any pathological condition. As to the shape of the normal stomach, modern surgery and X-ray photography had shown that the stomach was not a sort of permanently dilated viscus of fixed shape, but an organ of very varied dimensions, and sometimes extremely limited in its location, presenting much more the appearance of a tube than a bag, and, when peristalsis was taking place, resembling much more a portion of the intestinal canal than an organ possessed of any peculiar and specially complicated action.

Dealing, secondly, with pathological conditions, it was doubtful if there was any such condition as uncomplicated dilatation or idiopathic enlargement of the stomach. It was possible that one enormous meal or the more or less constant ingestion of large quantities of food or fluid, might so over-distend the viscus that its parietes became temporarily paralysed, just as the urinary bladder might become paralysed and dilated by prolonged retention of a large quantity of urine. But it was doubtful if a simple chronic gastric catarrh could lead to dilatation. When dilatation was present it was much more probable that the catarrh was a consequence and not a cause; and that there was some obstruction which had indirectly given rise to the inflamed condition of the mucous membrane. The only exceptions were cases in which adhesions had interfered with efficient contraction and completely emptying the organ. Nephroptosis sometimes acted as a mechanical cause of dilatation, either by kinking a portion of the duodenum or by pressing on the bowel. Further, non-obstructive dilatation was a condition unknown in any other part of the alimentary canal, or, indeed, in any viscus which possessed muscle parietes.

Diagnosis in the early stages of the disease was difficult because so many cases temporarily improved under certain forms of treatment. The first result of any obstruction was increased contraction, followed by increased muscle development; but if the obstruction continued a time came when the hypertrophied muscle parietes failed to overcome it and gave way to relaxation. Dilatation then commenced and the viscus remained enlarged until the muscle recovered from its exhaustion and was again fit to overcome the obstruction. Hence arose many clinical difficulties. Thus, if a patient in the early stages of his trouble were fed with easily digestible food the stomach could overcome the obstruction and there might be no symptoms even of gastric disturbance; but if he returned to ordinary diet, symptoms reappeared. Or such a patient might complain that when feeling overtired or run down in health his gastric symptoms became augmented, and that as his general condition improved, by rest or holiday, they disappeared, only to return when he resumed his ordinary work and mode of living. In nearly all cases there followed sooner or later retention of the ingesta with fermentative changes. If by lavage these were prevented, the motor functions of the viscus might be so improved that normal contractions would occur and symptoms of dilatation disappear, to return when lavage was desisted from. Similar temporary improvement could be secured by massage or electrical treatment.

It was in the pyloric antrum that dilatation first showed itself. This part, becoming enlarged, was carried downward and outwards to the right of the middle line, and sometimes showed distinct hernial pouching. At a later stage dilatation involved the whole body of the viscus, which, as in a striking case operated on by Mr. Maylard, might become converted into an enormous tense thin-walled cyst, resembling an ovarian cyst.

The Causes of obstruction might be connected with the duodenum, the pylorus, or the body of the stomach, and might be innocent or malignant. Obstruction might be caused by kinking of the canal, the result of simple ptosis or from dragging down by adhesions; or by narrowing of the pyloric aperture due to congenital hypertrophy or to some check in the normal process of development. The latter class of case occurred mostly among young adults, who, while healthy in every other respect, suffered from periods of indigestion, and showed evidences of intermittent attacks of gastric dilatation. Spasmodic contraction of the pylorus, said to be associated with hyperacidity, was a possible but improbable cause of obstruction. In the diagnosis of dilatation percussion alone or in conjunction with auscultation was not of much service except in advanced cases, as a perfectly normal viscus might reach down to or beyond the umbilicus, and splashing might be found under quite normal conditions up to four hours after a meal. Two of the most striking symptoms of dilatation were the vomiting or withdrawal of large quantities of brownish sour-smelling material like thin porridge, and the effects produced by mechanical distension such as the pumping in of air by a Higginson's syringe. X-ray photography had recently added considerably to the means of diagnosis. Skiagrams taken after the ingestion of bismuth meals gave very clear and instructive information in cases of marked obstruction. When obstruction had not led to very pronounced dilatation, the pyloric half of the organ assumed a transverse position, and presented the appearance described by Cole as "prognathian or undershot." In advanced cases the meal was seen to lie in the lower part of the viscus, due to the fact that the parietes of the stomach had lost all power to contract on the contents, so that they simply gravitated to the most dependent part of the organ.

As to *prognosis*, it was almost right to say that once obstruction always obstruction, as the improvement which often followed careful dieting and lavage was as a rule only temporary. Often, prior to dilatation, the stomach parietes, making an effort to drive out the contents, underwent spasmodic contraction which caused great pain. In cases where dilatation had become permanent, gastric tetany was an occasional and very fatal result, due probably to some toxine produced among the fermentative products of the retained ingesta. Where carcinoma was the obstructing cause, death might result from one of the many complications incident to that disease. An interesting case of the natural cure of obstruction was reported by Dr. Bradshaw in the *Lancet*, but such an event must be extremely rare.

As to *treatment*, recognition of the fact that the great majority of cases of dilatation of the stomach were due to mechanical obstruction would save many a patient months, and even years, of ineffectual dietetic and medicinal treatment, by the timely intervention of surgery. It was a mistake to attempt to treat the dilatation, which was only a symptom, regardless of the cause upon which it depended; hence lessening the size of a big stomach by puckering or infolding (gastrorraphy) was seldom done now. Whatever operation was undertaken must aim at overcoming the obstruction. At present, gastrojejunostomy was the method most in vogue, but cases had to be dealt with according to the nature of the obstruction. Thus, if the cause were adhesions, their separation (gastrolysis) might suffice; if it were nephroptosis, fixation of the kidney would be necessary. In carcinoma of the pylorus, if extirpation of the disease seemed feasible, a sub-total gastrectomy had to be added to the gastro-jejunostomy. In the condition described above of narrowness of the pyloric orifice, the result of defective development, Finney's modification of gastro-duodenostomy was to be preferred, as it permitted the enlargement of the narrowed outlet without in any material way disturbing the normal function of the duodenum. Loretta's operation of forcibly stretching the constricted canal (pyloro-diosis), and the Heineke-Mikulioz operation of pyloroplasty were rarely practised nowadays. How successful were the various methods employed for the treatment of dilatation was best testified by the excellence of both the immediate and remote results. For, in the former, the mortality after operation, in experienced hands, did not exceed 2 or 3 per cent.; while in the latter there could be no one present who had not seen a life of perpetual gastric misery changed into one of permanent gastric joy.

On the conclusion of the address, Dr. James R.

Riddell gave a lantern demonstration of skiagrams illustrating various appearances of the stomach in conditions of health and disease.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 11th, 1913.

Poisoning from Mushrooms.

Every year records numerous cases of poisoning from mushrooms, many of which are fatal. As this is the season of these cryptogams, a few words on the cause, symptoms and treatment of fungoid intoxication may be of service. It is true that such cases are rather rare in England, where but one or two varieties of mushrooms are considered edible, but they are very frequent in France, where several varieties enter into the food of the people, the difference between the toxic and non-toxic fungi being so slight to the inexperienced that accidents are frequent and apparently unavoidable.

Toxic mushrooms are divided, says Dr. Chauvet, into two classes—dangerous and mortal. The first class pertains to the Amanites (Amanita pantheria), Amanite fly-killer (Amanita muscaria). These mushrooms contain a poison called "muscarine."

The *début* is brusque—from one to three hours after ingestion of the fungi. The patient complains of violent burning in the epigastrium, is seized with vomiting and profuse serous diarrhœa. The temperature is normal, the pulse regular, the urine scanty. After an hour or two, the patient becomes delirious, cries out, gesticulates, laughs immoderately, tries to walk, but staggers like a drunken man. At the end of some hours the delirium ceases, the gastro-intestinal troubles amend, the patient falls into a slumber, and finally awakens feeling much better but confused as to what passed.

Such is the usual evolution of poisoning by muscarine. A fatal termination arrives only where a very large quantity of the cryptogams has been ingested, or where the patient, by reason of his age or a pre-existing lesion (cardiac, hepatic, renal) is in a condition of inferiority as regards the toxic element.

Muscarine poisoning is consequently grave but rarely mortal. Its relative benignity is due to the fact that the toxic substance is rejected by the initial accidents—vomiting and diarrhœa.

Treatment.—Encourage vomiting by tickling the back of the throat with a feather or by giving warm water to drink; no other emetics. The stomach pump should be used when possible, and the patient given a purgative dose of castor oil. Efforts should be made to increase the quantity of urine by diuretic drinks and especially by subcutaneous injections of artificial serum (one quart daily). These injections relieve the thirst, dilute the toxines, provoke diuresis, and procure an agreeable sensation of *bien être*. Certain remedies have been recommended as antidotes—atropine, charcoal powder, tincture of iodine—but their efficacy is doubtful.

The second class of toxic mushrooms comprises the different varieties of phalloid amanites (Amanita phalloides). These fungi owe their toxicity to a mortal hæmolytic poison—phalline. Here the period of incubation may last ten, twelve, or even twenty-four hours. The patient is seized with vertigo and a sensation of strangulation, he complains of great burning in the stomach, intense thirst, and violent cramps in the arms and legs. Incessant vomiting sets in with excruciating pain in the epigastrium followed by profuse and fœtid diarrhœa; oliguria is almost absolute. It is at this stage that medical assistance is called for. The patient is found in bed, the features drawn, the pupils contracted, the extremities cold, the pulse small and hypothermia. Frequently at the end of a few hours matters seem to mend; pain, vomiting and diarrhœa are relieved, the patient falls into a sleep, and hopes are entertained. But soon all the alarming symptoms return with increased violence: the cramps set in once more, the extremities are covered with a cold sweat, the face becomes livid, the pulse weaker and weaker, dyspnœa distressing, and the patient succumbs the same day or the following in full possession of his faculties. Recovery is exceptional.

Treatment.—In addition to that mentioned in the case of muscarine poisoning, the heart must be sustained by injections of ether, camphorated oil, sparteine, etc.; no alcohol should be given, as it facilitates the absorption of the poison. Hypothermia should be treated by dry friction of the skin and hot-water bottles; morphia, although irrational, will have to be given to relieve the intense suffering, the dyspnœa by injections of ether and inhalations of oxygen gas.

Statistics.

The total number of doctors of medicine in France is 20,809; that of dentists 2,848; midwives, 13,066; chemists, 11,585. The proportion of doctors to the population is 1 to 2,000. Of the Departments, the Seine (Paris) contains, as may be naturally supposed, the largest number (4,393), while the Hautes Alpes has the smallest (29).

GERMANY.

Berlin, Oct. 11th, 1913.

At the Schlesische Gesellschaft für Vaterländische Kultur, Hr. L. Fraenkel showed a case in which

Delivery had Taken Place after Operative Union of a Double Uterus.

As the patient was about to return to her home he wished to show her to the Society. She first came under the speaker's care two and a quarter months ago, seeking advice because her children could not be born alive. This failure had occurred three times. The husband was a healthy man, and the only thing about her that was wrong was that the genital organs were double in such a way that the two horns of the uterus were completely apart, whilst below was a single collum that was divided into two halves by a central septum wall. Besides all this there was a vaginal septum. It was not difficult to understand that a child could not be brought to maturity in a half-developed uterus. He therefore proposed to the patient as the only rational method of procedure to unite the two halves of the uterus by an operation, but at the same time he would not raise her expectations to too high a pitch by promising that the operation would enable her to give birth to a living child. Such an operation had been proposed, and even carried out by Strassmann, but without attaining the end desired—that of rendering possible the birth of a living child. The speaker excised the bands of the vagina and of the collum per vaginam, after which laparotomy was performed. A large wedge-shaped piece was then removed from the opposite surfaces of the two cornua, and the opposing parts were brought together. To permit this, the bladder had to be separated, and the lower part of the wedge incision to be carried deeply into the collum of the uterus. The hæmorrhage during the operation was arrested in the same way as during the operation for Cæsarean section, by compressing as well as possible the upper angles of both sides of the double uterus. The extent of suture line was very great, but in the end an organ was produced that looked not much unlike a rather large simple uterus. The course of recovery was quite smooth. The patient went home, and for two years nothing more was heard of her, until a second case of the kind presented, when the first was brought into remembrance. Inquiry was now made, and an answer came to the effect that the patient was quite well, that she was pregnant again, and that she had already passed the period at which her former miscarriages had taken place. As the patient lived in a remote country district of Poland, as the lines of cicatrix were so extensive, and as there seemed to be a great danger of something giving way, he begged her to come into the hospital for the confinement. She came, and nine days ago the patient was safely delivered of a 6-lb. child spontaneously and quite easily. The placenta also separated and came away without the least trouble. Recovery was uninterrupted, and the patient had left the hospital. After such an experience, the speaker would operate in another similar case with great confidence. Such a case was not far to seek, as only a short time ago a patient with a double uterus was delivered of twins—one in each perfectly separate and distinct horn of the uterus, as a matter of fact. One was a transverse presentation with a prolapse of the cord before the commencement of labour, the other (the first-born) had placenta prævia. Both were unviable. In this case also it was the third time she had failed to carry the offspring to maturity. After the happy result of the former case the speaker held himself justified in proposing to operate as in the first case. (It was later announced that the operation proposed had been carried out, but the result had not been made public.)

In the treatment of

Disturbances of the Internal Secretions of the Ovaries

Dr. Hirsch, of the Israelitischer Krankenheim, with ovarian extract, has met with a considerable amount of success. The preparation he makes use of is a liquid one, 2.2 c.cm. of which correspond to 2 grm. of ovarian tissue. He used it in 28 cases of climacteric troubles, 37 cases of dysmenorrhœa, 16 of oligo- or a-menorrhœa, 3 of pruritus vulvæ, and 2 of skin affections associated with pregnancy. The climacteric disturbances, whether following natural cessation of the menses or the result of castration operations, were favourably influenced by injections of glanduovin, as he names the preparation (successful in 25 out of the 28 cases in which it was employed). Of dysmenorrhœic troubles, in 37 cases failure was noted in only five of them. In the cases of so-called Mittelschmerz the treatment was without avail. In 16 cases of oligo- or a-menorrhœa there was only one failure. In two dermatoses of pregnancy only one was influenced favourably. In two cases of pruritus vulvæ of pregnancy only one was influenced favourably, and the like in two non-pregnant cases. It was made use of in 19 cases of hyperemesis gravidarum, but success was met with in only nine of them. The injections were given daily until a result was obtained. Generally two or three injections sufficed. As to the manner of action, the writer is of opinion that the favourable results, when present, are due to hormones that are introduced strengthening the action of the natural ones.

AUSTRIA.

Vienna, Oct. 11th, 1913.

Ferments Destructive to Special Organs, Found in Blood of Mongolians.

At the recent meeting of the Congress in Vienna, Dr. P. Jodicke discussed the interesting subject of the special ferments found in the blood of mongolians which have a specifically destructive effect on certain organs. He pointed out at the opening that certain forms of mental weakness have received special attention during the past few decades from the distinctive type of physiognomy which seems to mark off the affected individuals by groups characterised by recognisable features. Cretinism and myxœdema had their turns of special attention; and still more recently the subject of mongolism has been critically examined by observers in many nations. Numerous papers and monographs have discussed the characteristic bodily features of mongolism, and the similarity of these to the corresponding peculiarities of the physiognomy of the Mongolian race—the cranial outlines, form of the brain, the eyes, heart, mouth, tongue, hands and fingers, as well as intellectual capabilities. Still it must be admitted that our knowledge of, and views regarding, the intimate nature of mongolism still remain largely hypothetical. Many casuistic contributions have displayed collation of much clinical material without advancing a single new enlightening viewpoint. Since the first discussion of mongolian idiocy by Langdon Down in 1866, the more prominent contributors have been T. Smith, Sutherland and Garrod in England; Bourneville in France; Kassowitz in Austria; Vogt, Weygandt, Scholz and Siegert in Germany—all of whom have contributed liberally to the question of differentiation of myxidiocy. Siegert regards this clinical condition as one of exhaustion: in case of its older subjects resulting from prolonged and successive periods of illness; in the young, from tuberculosis, lues, neuropathic conditions, etc., of degenerate parents—these are more likely to occur in the more prosperous classes. According to the results of Weygandt's researches, degenerative processes have interfered with the development of the cerebral cortex. Other authors accuse defective development of the cerebral convolutions, flattening and falling in of certain portions of the cortex, defective development of the pons varolii, absence of the corpus callosum, etc.—defects which have, however, been noticed in other forms of idiocy.

Close relationship was soon observed between the symptomatic conditions of myxœdema and mongolism, and structural alterations in the thyroid gland. Philippe and Oberthner placed first sclerotic changes and proliferation of connective tissue in the thyroid gland. In the case of an affected child, who died of diphtheria, Fromm and Lange found proliferation of the interstitial connective tissue with extensive colloid degeneration. Kassowitz concluded that there was an essential association with myxœdema. It cannot, however, be accounted for by mere failure of the thyroid functions, as the same cause could not produce results so various. There must be, probably, a lesion of some other organ as well, one of which the effects tell on the thyroid gland also with deleterious effect. This view is adopted by Sanctis and Buschan. Schüller and Alt, having regard to the clinical conditions which characterise derangement of the ductless glands, look upon mongolism as a case of primary dysgenitalism, comparable to the infantile and acromegalic giant growth and adiposity. Siegert met with a case associated with persistence of the thymus gland, which showed excessive hyperplasia.

Thus we see that the varied co-existing conditions fail to throw light on the genesis of mongolism. But the dialytic experiments of Aberhalden seem to promise better. When defective development of the brain—in varied manifestations—gives rise to clinical features so characteristic as to make all the victims referrible at sight to a single family group, it is unfortunate that we cannot trace the serial linkage in the chain of causes. An interesting item of information is here presented by the fact that in some typical cases of mongolism, as in cases of athyroidism, there has been found an abnormally high capacity for assimilation of grape-sugar. And Dr. Jodicke, while agreeing from his own experience with the recorded concidence of defective thyroid function with mongolism, would not regard the cause-and-effect relationship as definitely established. With a view to settlement of this obscure question, he proceeded to separate the internal secretion by the dialytic process devised by Aberhalden. The details of his experimental procedures were too minute and complicated to be summarised here, but the net result was, unhappily, negative. In no one of the seven cases of pronounced mongolism which he investigated was he able to demonstrate the existence of functional incapacity of the thyroid gland. But he hopes that by persisting in this line of research he will be able to attain positive results in the near future.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH.

Clinical Instruction in Edinburgh.

Although at the time of writing we still await the appointment of the new Professor of Clinical Medicine, the re-arrangement of the teaching of clinical medicine, following on the agreement made between the managers of the infirmary and the University authorities, which was referred to some months ago in this column, becomes effective from the beginning of this session.

Sir Thomas Fraser, who has returned to work after the tedious convalescence imposed on him by his accident last November, devoted the inaugural lecture on clinical medicine to a description of the new system. He described it as epoch-making, one of its salient features being an incorporation of the whole medical staff of the Infirmary in the University, and the abolition, in all essential points, of the distinctions between professors and extra-mural lecturers. The ordinary physicians become senior lecturers, the assistant physicians lecturers, and the tutors University assistants. So long as there exists a University group of wards and an extra-mural group of wards the tendency was inevitably for the respective students to gravitate in different directions, and this had limited the full use of the wards and the teaching power of the staff. The new system includes the employment of all the senior lecturers as examiners in clinical medicine, and an allocation of the students among the different teachers, so that no clinic may be unduly crowded. The assistant physicians, whose duties have hitherto been in large measure restricted to the out-patient department, will in future take part in the teaching in the wards; they thus assume the position of *chefs de clinique,* who have existed with so much advantage for many years in France and Germany. Instruction in special clinical work, especially in its more purely scientific aspects, is consigned to the clinical tutors, and for this purpose five rooms have been fitted up with suitable apparatus. In commenting generally on the new system, Sir Thomas Fraser said that it would be a fatal error for a student to wander from one clinic to another, and that he must attach himself for at least six months to the teacher of his choice. The main features of the agreement, apart from those referred to by Sir Thomas Fraser, may be summarised as follows:—The wards at present under the charge of the Professors of Materia Medica and Pathology are definitely pledged to the University. Appointments to professorships of clinical medicine are to be made in consultation with the manager of the Infirmary. Appointments to the medical staff are to be made on the recommendation of a selection committee, representing the Managers, the University, and the Royal Colleges. The assistant physicians and the clinical tutors are to be paid by the University, while the physicians (senior lecturers) are to receive the class fees, less certain deductions, and an honorarium for examining. In surgery the arrangements are, *mutatis mutandis*, much the same. Clinical gynæcology is to be dissociated from clinical medicine and made a special department, the two gynæcologists becoming senior lecturers, and the two assistant gynæcologists becoming lecturers with salaries. In the pathological department, Professor Lorrain Smith becomes Consulting Pathologist, and Dr. Shennan, the present Pathologist, becomes Lecturer on Morbid Anatomy, with a salary. When Dr. Shennan ceases to hold office as Pathologist, he will be succeeded by Professor Lorrain Smith. The whole plan in effect draws clinical teaching and pathology into the University, and breaks down the traditional wall between the extra-mural and intra-mural school. That the time for the change has come is evident to all, and many of those who were strongest in their support of the extra-mural school in the past now see that with changing circumstances the best way to maintain it in vigour as a part of the medical school is to seek the friendly aid of the University. Both bodies are strengthened by union.

GLASGOW.

OPENING OF THE WINTER SESSION.

WITH the opening of the winter session of the University and the extra-mural schools, following on the opening last week of the other medical schools in Scotland, the medical year has now fairly begun. The medical faculty of Glasgow University has never, on the whole, been stronger or better equipped than it is at present. Much of the present position of this faculty is due, of course, to the money which the University generally has been receiving, in common with other universities, from the public purse, and to the lavish benefactions which, especially of late years, the medical faculty has received from private donors. The stimulus of competition with the extra-mural schools is, no doubt, also beneficial.

A DENTAL CURRICULUM.

Not all the Universities provide a complete dental curriculum, and Glasgow University is among those which do not. Looking to this fact, the Governors of Anderson's College Medical School, situated close to the University, have now made additions to their staff of lecturers, with the result of providing a full dental curriculum. The new appointments made are of Prof. Carstairs C. Douglas as Lecturer on Dental Bacteriology; Dr. W. Ferguson Mackenzie as Lecturer on Dental Anatomy; Dr. John Watt as Lecturer on Dental Surgery; and Mr. Charles Read as Lecturer on Dental Metallurgy.

A MEDICAL LADY MILITANT.

Dr. Elizabeth Dorothea Chalmers Smith, who, along with another lady, is accused of having broken into a Glasgow West-end mansion with the intention of burning it, appeared, with her fellow-accused, before the Sheriff on October 4th. Both ladies refused to approach the dock, but answered from the body of the Court. They declined, however, to plead guilty or not guilty. They will be tried on October 15th, at a sitting in Glasgow of the High Court of Justiciary. Mrs. Smith is the wife of a well-known Glasgow clergyman.

THE BREATHING MECHANISM IN DIVING.

Prof. D. Noel Paton, at the opening of the Session of the Royal Philosophical Society of Glasgow on October 8th, delivered a lecture on this subject. He first referred to the very different power of enduring submergence shown by different animals and by different persons, and to the influence of practice in increasing this power. He pointed out that to prevent drowning in submergence the breathing must be stopped, so that the water is not sucked into the lungs, and a supply of oxygen must be secured by storing air in the body or by storing oxygen in the blood. A man by deep and rapid breathing can so clear out the carbonic acid—the normal stimulator of respiration—from his body that a condition of apnœa —absence of breathing—lasting in some individuals for as much as three or four minutes, may be produced, and if at the same time he saturates his body with oxygen by one or two inhalations of that gas, he may be able to hold his breath for as much as eight minutes. In ducks the power of sustaining submergence is peculiarly well developed: they stop breathing and remain in a state of apnœa.

Dr. James H. Macdonald, of the Govan District Asylum, Hawkhead, has been appointed Mackintosh Lecturer in Psychological Medicine in Glasgow University.

BELFAST.

BENN ULSTER EYE, EAR AND THROAT HOSPITAL, BELFAST.

AT a meeting of the Executive Committee of the above institution a hearty vote of thanks was conveyed to Mr. Henry Hanna, M.B., B.Sc., M.A., on his resignation of the post of Assistant Surgeon, for his services during his tenure of office. Mr. Hanna has been appointed Surgeon to the Eye, Ear and Throat department of the Union Infirmary in the place of Mr. James Craig, F.R.C.S.Eng., who succeeds the late Dr. Shaw as Lecturer on Ophthalmology at the Queen's University of Belfast. Dr. F. C. Smyth, who has for some years acted as Honorary Anæsthetist to the Benn Hospital, has also resigned, and a similar compliment was accorded to him by the Committee. Dr. Isaac Davidson has been appointed to succeed Mr. Hanna, and Dr. W. A. Anderson has been appointed an additional Assistant Surgeon. Dr. H. Norman Barnett has been appointed Anæsthetist in the room of Dr. F. C. Smyth.

ROYAL VICTORIA HOSPITAL.—THE KING EDWARD MEMORIAL.

This memorial to the late King is to take the form of additional buildings for the accommodation of the Electrical Department and the Department of Hæmatology and Serum Therapy. The plans have now been passed, and the work is to begin immediately, It is expected that the new buildings will be completed in eighteen months' time. The Winter Session at the Royal Victoria Hospital will be inaugurated by an opening lecture by Dr. Rankin, Assistant Physician in Charge of the Electrical Department, on the 14th inst. The new buildings on the medical side of the Queen's University are now practically completed, and it is expected that they will be opened during the coming session. The Anatomy Department will, when completed, be one of the best in the kingdom.

The Abbey Sanatorium, Whiteabbey.

At a meeting of the Belfast Board of Guardians, held on the 7th inst., Dr. Robert Hall, Senior Medical Officer of the Sanatorium, reported that the Right Hon. Sir Henry Robinson, Vice-President of the Local Government Board, had recently visited the Institution and expressed himself as pleased with everything the Guardians had done in connection with it. A letter was read from the Town Clerk stating that the Corporation had received an intimation that their scheme for the treatment of tuberculosis had been sanctioned, and that they proposed, with the concurrence of the Board of Guardians, to ask the Local Government Board to arrange for the transfer of the Sanatorium from the 1st inst. This proposal met with the cordial support of the Guardians, so that it is probable that in the near future all arrangements for the transfer of this splendid institution from the care of the Guardians to that of the Belfast Corporation will be completed.

MANCHESTER.

Dinner to Prof. Delepine.

Prof. Sheridan Delepine, Professor of Public Health and Bacteriology in the Victoria University, Manchester, was entertained to dinner at the Midland Hotel, Manchester, on Friday night, October 11th. The event marked the completion of twenty-one years' association with the University, and an address was presented to him signed by more than 200 of his former pupils, and in addition to the congratulations of those present best wishes were sent from old pupils in different parts of the globe.

Dr. Newsholme, of the Local Government Board, presided, and in his speech referred to the inspiration they owed to Prof. Delépine, and to the value they attached to his pioneer work in applying pathology to public work.

Dr. W. J. Howarth presented the address to Dr. Delépine, in which his former students expressed affectionate regard for the Professor and pride in his scientific attainments, and deep admiration of his work for Manchester University and for the students who came under his care, and set on record that "You built up a Public Health Department of which the University and City may be justly proud. It has served as a model which others have followed with advantage. Representatives of every branch of public health service are among those who are proud to have the privilege of being trained within its walls."

Dr. Coutts, proposing "Our Guest," said they admired him as a man, a scientist, a teacher, and organiser, and both in England and throughout the world many important positions as public health officers were held by his former students.

Prof. Delépine, in reply, said his aim had been to make his pupils trustworthy and efficient servants of the State by helping them to combat human suffering and to give them pleasure in honest work and the accomplishment of duty. The Manchester Public Health School had been fortunate in the qualities of the men who had passed through it. He suggested that this should be the first of many gatherings of old and new members of the school, and asked them to use their power to endow at the Manchester University a Chair of Preventive or State Medicine. He expressed satisfaction that one hundred sanitary authorities in the midst of a large population were connected with their laboratory.

Sir Edward Donner, Chairman of the Advisory Committee, expressed the great opinion he always had of Prof. Delépine, as a man of science and a man of business, and his great regard for him as a friend.

Dr James Niven, Medical Officer of Health for Manchester, described the Public Health School established by Professor Delépine as probably the finest in the country.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE DISCOVERY OF THE RADIUM-MESOTHORIUM CURE OF CHRONIC DEAFNESS OF THE HOPELESS KIND.

To the Editor of The Medical Press and Circular.

Sir,—Among the seriously inaccurate statements that have quite recently been made in the lay Press in regard to treatment by radium and radio-active agencies that alleged to have emanated from the "Medezenalen Klinik," in which Dr. Hugel, of Berlin, is credited with having discovered the curative effects of radium and mesothorium in chronic deafness, is one that cannot be allowed to pass unchallenged.

Having in October, 1908, observed and realised the curative effect of what I had provisionally termed the "ultra-X-rays" in a case of chronic deafness in a hospital out-patient, who was being treated under my directions for specific gummata of the tongue, obliquely through the open mouth; a second case that had been otologically examined and given up as hopeless being that of an acquired deaf mute, was experimentally subjected to a similar course of "ultra-X-ray" treatment, with very satisfactory results. Both cases were subsequently exhibited at the hospital clinical meetings and were duly published.

As two such exceptional experiences were not sufficiently conclusive they were subjected to the test of time, and the experiments were repeated in a few similarly hopeless deaf cases in 1909. During this year I also began to treat some with a plaque of radium bromide, which I fixed over the mastoid process, and later the radio-active mineral autunite was introduced into the meatus in one centigramme metal capsules. In April, 1910, I brought forward two of the originally deaf patients, before the Neurological Section of the Royal Society of Medicine, in order to illustrate what I then termed the neurogenetic effect or amœboidism induced by these radiations in nerve terminals. Owing to the large number of cases that were exhibited on that occasion, the exhibition of mine was unavoidably deferred.

This experimental research was, however, continued without intermission, in spite of the obstacles that presented themselves. By August, 1912, having had a large and convincing experience, I submitted the notes of a few of these cases to the *Lancet*. The Editor courteously replied in returning my notes, and suggested that my cases had better be exhibited and discussed at one of the medical societies before publication. Accordingly, in November, 1912, the notes of my eight earliest cases (five of which were originally deaf mutes) were submitted to the President of the Otological Section of the Royal Society of Medicine. After a few days, he expressed his interest in the notes, and kindly offered to introduce me to the meeting when the time arrived. Not being an otologist or a member of that section, I was informed that the notes would first have the consideration of the Council before a date could be fixed for their discussion. This date was finally fixed for the 21st February, 1913, three months later.

At the eleventh hour, however, after the circulation of the notes on the agenda paper of the meeting, certain of the members of that section raised a protest to the President, threatening to resign and form another otological society if my cases were examined or discussed. The President, under these circumstances, reluctantly complied with their demands, and I was requested to cancel by wire my invitations to my patients; but this I could not bring myself to do; the patients were there, also a few medical men concerned in them, but they were not examined or discussed to the consternation of many. I had the honour, however, of introducing some to the President.

Since this incident in the research, that matter has been in the hands of my legal advisers. The experiments were continued, and in June last, at the invitation of the British Oto-laryngological Society, I was able to exhibit four further cases that had been otologically tested both before and after a four months' course of treatment. A report was published in the Medical Press and Circular, July 23rd, and in the *Lancet* of the 26th July last, in page 223, which speaks for itself. For this kind of aid I desire to thank the Fellows of this Society.

As to the identical relationship of the radiations emanating from the radium and mesothorium, with those from such a Crookes tube, to the discharges from which I have provisionally applied the term "ultra-X," may be questioned by some practitioners; permit me to describe that association briefly. Radium and mesothorium are elements both of which discharge the long beta and the gamma radiations, the "surpenetrans" of Dominici, but the enclosing metal or filter that is used to cut off the inevitable short radiations that damage the skin structures, has, set up within the molecules of the metal, new secondary radiations of short length, the action of which has also to be provided against by more dense covering; other factors need not here be mentioned. A Crookes tube that becomes useless for superficial therapeutic purposes, after repeated regenerations, the vacuum being now very high, it ceases to discharge the short radiations, though the long beta and gamma radiations continue to be discharged for some time longer with proper management, while using a heavy current and a spark gap of from ten to twelve inches. At this stage there is no difference therapeutically between these types of radiations from the sources under consideration. There is no primary necessity for protecting the skin from the action of these ultra-X rays. No metal filter being applied to the skin, there are no secondary radiations generated at the skin. An aluminium filter or thick leather disc is used in the path of the rays, at some distance from the skin surface, as a precaution against the occasional softening of the tube by heat at the anode when the cooling device fails. This valuable deep therapeutic feature of a high Crookes tube has not been known to medical science hitherto.

I am anxious to invite discussion which may help us nearer to the truth which we are all seeking.

I am, Sir, yours truly,
H. D. McCulloch.

77, Gloucester Place, Portman Square, W.,
October 7th, 1913.

MEDICAL MEN UNDER THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Dear Sir,—In a letter you did me the honour to publish in your issue of September 17th, I said we panel doctors were slaves. Does not the Liverpool case (Dr. Duncan's) prove that we are worse than slaves—i.e., have to suffer for the negligence of others. The Manchester statistics (which I had hoped you would comment on) prove the inadequacy of the remuneration. Yours, etc.

London, S.W. An Old Radical.
October 12th, 1913.

A PRACTICAL CONSIDERATION OF VACCINE THERAPY.

To the Editor of The Medical Press and Circular.

Sir,—I find in Dr. Wyatt Wingrave's interesting lecture on "A Practical Consideration of Vaccine Therapy," reported in your issue of October 8th, the following passage: "Take the case of the dog licking his sores; he is practically giving himself an autovaccine, and a very good one, too. He is licking up the bacteria from his wound and killing them by probably the acidity of his stomach; the endo-toxins are liberated in his stomach and bowels, they are absorbed by the blood and then set up an immunity."

What I would like to ask Dr. Wingrave is, how is it, if this is the case, that the swallowing of pus in cases of pyorrhœa, chronic discharging abscess of the mouth, etc., are productive of such serious constitutional results?

Surely, if we may reason by analogy, in the face of what Dr. Wingrave tells us to be the case, quite a contrary effect should be anticipated.

Yours faithfully,
Wm. M. Gabriel, M.R.C.S., L.D.S.Eng.

72, Ludgate Hill, London, E.C.
October 9th, 1913.

OBITUARY.

DR. JOHN MACMILLAN, OF EDINBURGH.

By the death of John Macmillan, which took place on October 7th, the medical profession has lost a man of varied attainments and high abilities. Dr. Macmillan entered the medical profession somewhat late in life, after his youth had been passed as a teacher of mathematics. He was an M.A. of St. Andrews, and in 1879 took the degree of B.Sc. at Edinburgh. He did not, however, graduate in medicine until 1892; he was a Fellow of both the Royal Colleges, and also a D.Sc. and a holder of the D.P.H. Owing perhaps to a too retiring disposition, and also to the delay in beginning medicine, he hardly met with that success in practice to which his merits entitled him. His reward was rather in the universal esteem of his fellows, and in the recognition which he gained as a teacher. He was an examiner in Biology in the College of Physicians, and a lecturer on medical jurisprudence. He had studied in Paris, Vienna, Berlin, and Jena, and was a man of wide and extensive culture. Some years ago he underwent a serious operation, and for a long time he appeared to have made a good recovery. Latterly, however, he had visibly failed, and although he was at his regular work until a few days before his death, his health had aroused the anxiety of his friends. He passed away peacefully after but a day or two's confinement to the house. Macmillan was a man of urbane and kindly disposition. Troubles passed lightly over his head; he had a friendly nod and greeting for all. He was a man whom all liked and respected, and who had not an enemy. He was unmarried.

LIEUT.-COL. J. RITCHIE.

We regret to announce the death of Lieutenant-Colonel John Ritchie, R.A.M.C., M.B., C.M., of 6 Glenan Gardens, Helensburgh, which took place on October 6th at a nursing home in Glasgow as the result of injuries he received through falling over an embankment at Blantyre Priory, near Uddingston, on the 4th inst. He saw considerable service in the South African War. Born in 1862, Colonel Ritchie was educated at Glasgow University, where he took the M.B. in 1884. He became Captain in the Royal Army Medical Corps three years later, and in 1898 went out to West Africa, where he saw service. In 1898-9 he was present at the operations in Sierra Leone, and received the medal with clasp. During the South African War he took part in the operations in the Orange Free State in April and May, 1900, and subsequently in the operations in the Transvaal, including the actions near Johannesburg, Pretoria, and Diamond Hill. Later in the same year, 1900, he was engaged in the operations in the Orange River Colony, including the actions at Wittebergen in July, and afterwards in Cape Colony, south of Orange River, and again in the Transvaal from March, 1901, to May, 1902. For these services he was awarded the Queen's medal with four clasps and the King's medal with two clasps. Colonel Ritchie contributed an article on "The Fevers of West Africa" to the *Glasgow Medical Journal* in 1898, and also wrote on his experiences in the South African War.

Medical News in Brief.

Central London Throat and Ear Hospital.

The winter session at the Central London Throat and Ear Hospital, Gray's Inn Road, W.C. will commence on Friday, October 17th, when Dr. Thomas James Walker will deliver the inaugural address, "Laryngoscopy 1860 to 1913—A Retrospect," at 3 p.m. The annual dinner of the staff with past and present students will take place the same evening at the Trocadero Restaurant, Dr. Dan McKenzie in the chair.

The Royal Medical Benevolent Fund.

Dr. Norman Porritt, of Huddersfield, Hon. Treasurer of the Society of Medical Phonographers, has forwarded on behalf of that Society a cheque for £7 7s. towards the funds of the Royal Medical Benevolent Fund.

Royal College of Surgeons of England.

The following demonstrations of specimens in the Museum will be given in the theatre of the College in Lincoln's Inn Fields. The demonstrations are intended for advanced students and medical practitioners—

Friday, October 17th, 5 p.m., Professor Keith.—Specimens illustrating the lesions of Anchondroplasia, Osteogenesis imperfecta, and allied conditions.

Monday, October 20th, 5 p.m., Mr. Shattock.—Specimens illustrating Fibroma.

Wednesday, October 22nd, 5.30 p.m., Mr. Colyer.—Specimens illustrating irregularities of the teeth in animals.

Friday, October 24th, 5 p.m., Professor Keith.—Specimens illustrating anatomical and pathogical conditions of the Great Bowel in cases of Intestinal Stasis.

Monday October 27th, 5 p.m., Mr. Shattock.—Specimens illustrating Myxoma and Chondroma.

Wednesday, October 29th, 5.30 p.m., Mr. Colyer.—Specimens illustrating irregularities of the teeth in man.

Friday, October 31st, 5 p.m., Professor Keith.—Specimens illustrating certain points in the anatomy and physiology of the Ear.

Monday, November 3rd, 5 p.m., Mr. Shattock.—Specimens illustrating osteoplastic inflammation of bone.

University of Edinburgh.

The following candidates have passed in chemistry of the first professional examination:—William Bald, Philip Barlow, Geoffrey P. Burns, Norman A. Doggart, M.A., Ajah S. Garewal. Francis Gunaratna, Edward S. Jackson, Norman Jennings , Robert MacGarrol, Alister R. Matheson, Samuel D. Nurse, Jossel Riesnik, Susan A. Robertson, Mary J. D. Rutherford, Raymond B. Smith, James A. Stirling.

The following candidates have passed in anatomy of the second professional examination—Willian W. Brown, Alexander Cleland, W. Haig Ferguson, Arthur B. Grant, William N. Greer, Thomas L. P. Harries, Wilhelmina W. Hendry. Arthur N. Homewood, William L. Hunter. Maurice K. Jardine, Charles M'Donald, John M'Garrity, Margaret M. M'Garrity, Ian Mackenzie. Ronald N. Mackenzie, Patrick D. M'Laren, M. A., Isobel M. M'Lullich, Donald A. Macrae, W. G. F. Owen Morris, Donald J. Morrison, George Nicholson, John O. Reid, Gokal C. Sahgal, John Sellar, John J. Shannon, Wm. A. Slack, Mukundrai D. Thakoro, Jacob I. de Villiers, Gladys Ward, Gladys R. M. V. Williamson, Colend M. M. Zubair.

The following candidates have passed in physiology of the second professional examination:—George S. Barnett, Demetrio Colombos, Kshirendra M. Dev, Sergoi I. Dmitrieff, Peter W. Edwards, William N. Greer, Thomas L. P. Harries, Francois J. Hauptfleisch, Jane E. Hay, Wilhelmina W. Hendry, Alexander Kennedy, Aubrey C. Kirton, Isobel M. M'Lullich, Annie M. Madin, Isabella Morison, Donald J. Morrison, Joseph E. Phillips, Gokal C. Sahgal, Ernest O. A. Singer, Erik D. Söderströn, Clement I. Stockley, George W. C. Sutherland, Mukundrai D. Thakore, Andre F. de Waal.

Royal Colleges of Physicians and Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

The following candidates having passed the requisite examinations of the above Board in October, were admitted Diplomates in Public Health:—Alexander D. Campbell, M.B., Ch.B.Ed., Gurudas Ram Vohra, L.R.C.P. and S.E., etc; Charles Cameron, M.B., Ch.B.Edin.; William A. Muir, M.B., Ch.B.Glasg.; Narain Rama Rao Ubhaya, L.R.C.P. and S.E., etc.; Andrew Campbell, M.B., Ch.B.Ed.; Gordon G. Jolly, M.B., Ch.B.Ed.; William S. McLaren, M.B., Ch.B.Ed.; James D. Saner, M.B., C.M.Ed.; Mangalore Laxumana, Bangara, M.B., Ch.B.Ed.; George Richardson, M.D., etc., Ed.; Alexander G. Ingram, M.B., C.M.Aberd.; and John A. MacLeod, M.B., Ch.B.Ed.

Edinburgh Royal Infirmary.

At a meeting of the managers of the Edinburgh Royal Infirmary held on the 6th inst., Mr. A. A. Scot Skirving, F.R.C.S.Ed., and Mr. George L. Chiene, F.R.C.S.Ed., assistant surgeons, were reappointed for further periods of five years each as from December 7th next. The following appointments were made for the ensuing winter and summer sessions:—Clinical Tutors—A. G. Henderson, M.B., Ch.B., to Dr. Graham Brown; H. W. Boreham, M.B., Ch.B., to Dr. W. G. Sym; E. H. Cameron, M.B., Ch.B., to Dr. J. V. Paterson. Clinical Tutors and Supervisors of the Administration of Anæsthetics—John M. Darling, F.R.C.S.Ed., to Mr. Cathcart; A. Pirie Watson, F.R.C.S.Ed., to Professor Thomson. Supervisor of the Administration of Anæsthetics—F. D. Cairns, M.B., Ch.B., to Dr. Barbour. Instructor in Anæsthesia—D. C. A. M'Alum, M.B.C.M., to Professor Caird.

Royal Academy of Medicine in Ireland.

At the annual general meeting of the Royal Academy of Medicine in Ireland, held in the Royal College of Surgeons last Friday, the following officers were elected for the coming year:—President, *Walter G. Smith; General Secretary, *J. Alfred Scott; Secretary for Foreign Correspondence, *Sir John Moore.

Medical Section.—President, J. O'Carroll—Council—1 W. Boxwell; 2 *H. C. Drury; 3 *J. Lumsden, 4 G. E. Nesbitt, 5 *J. A. Matson, 6 *Sir J. Moore, 7 *T. G. Moorhead, 8 *G. Peacocke, 9 *F. C. Purser, 10 *W. A. Winter.

Surgical Section.—President, R. D. Purefoy, P.R.C.S.—Council—1 *C. A. Ball, 2 *A. Blayney, 3 *L. G. Gunn, 4 *W. S. Haughton, 5 *R. C. B. Maunsell, 6 A. A. McConnell, 7 *W. Pearson, 8 *S. Pringle, 9 *R. A. Stoney, 10 *W. I. de C. Wheeler.

Obstetrical Section.—President. M. J. Gibson—Council—1 *G. FitzGibbon, 2 Sir A. Horne, 3 H. Jellett, 4 *T. Neill, 5 *R. D. Purefoy, 6 *J. S. Sheill, 7 *B. A. Solomons, 8 *Sir W. Smyly, 9 *A. Smith, 10 *E. H. Tweedy.

Pathological Section.—President J. B. Coleman—Council—1 *W. Boxwell, 2 R. M. Brontë, 3 *L. G. Gunn, 4 *W. G. Harvey, 6 *T. T. O'Farrell, 7 *W. D. O'Kelly, 8 *R. J. Rowlette, 9 *A. H. White, 10 J. T. Wigham, 11 *A. Wynne.

Section of Anatomy and Physiology.—President. B. J. Collingwood—Council—1 *W. M. Crofton, 2 *A. F. Dixon, 3 * T. P. C. Kirkpatrick, 4 *A. A. McConnell,, 5 *E. P. McLouglin.

Section of State Medicine.—President, T. P. C. Kirkpatrick—Council—1 *A. E. Boyd, 2 *W. M. Crofton, 3 J. Lumsden, 4 *J. A. Matson, 5 R. J. Rowlette, 6 *W. A. Winter.

Candidates marked (*) are outgoing officers who seek re-election.

Prof. William Stirling, M.D., F.R.S.E., will deliver the Lady Priestley Memorial Lecture under the auspices of the National Health Society on November 27th, at the Royal Society of Medicine.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DR S. R. (London, W.).—Ervasin is acetyl-para-creosotic acid, which is a homologue of acetyl-salicylic acid. It has been successfully used in the treatment of acute articular rheumatism.

L.R.C.P.EDIN. (Hants).—We could not advise salvarsan in any case where there is suspicion of renal disease. Mercurial treatment would, no doubt, be better tolerated.

BURSLEM.—The claim appears to us to be too indefinite to be sustained in a court of law. Unless our correspondent is prepared to incur heavy costs in the event of being non-suited, the risk of an action is scarcely advisable.

THE GUILD OF ST. LUKE FOR MEDICAL MEN.

THE annual service of the Guild of St. Luke will be held in St. Paul's Cathedral on Tuesday, October 21st, at 7.30 p.m., when the preacher will be the Rev. Canon Arnott, F.R.C.S., rector of Beckenham. The offerings, after the expenses of the service have been defrayed, will be for the missionary funds of the Guild. Tickets of admission can be obtained by sending a stamped addressed envelope to the Provost, Mr. George Cowell, F.R.C.S., 24 Harrington Gardens, S.W.

S. V. T. (Leeds).—The theory of the possible causation of new growths through the presence in excess of hormone, is one to which the attention of our correspondent might be directed.

CLUB DOCTOR.—It is now generally agreed that the main, if not the only, factor in the causation of miners' nystagmus is feeble illumination. For this the safety lamp is responsible. In pits in which candles are permissible, the defect is almost unknown among the colliers. The most recent work on the subject is "Das Augenzittern der Bergleute," by J. Ohm, published in Leipzig, an English translation of which, has so far, not been prepared.

OMEGA.—No information has reached us with reference to the report in question.

Meetings of the Societies, Lectures, &c.

THURSDAY, OCTOBER 16TH

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. Haldin Davis, Dr. Knowsley Sibley, Dr. J. M. H. MacLeod, and others.

FRIDAY, OCTOBER 17TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OTOLOGY) (1 Wimpole Street, W.).—5 p.m.: Cases by Mr. W. M. Mollison, Mr. Sydney Scott, and others.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS) (1 Wimpole Street, W.).—8.30 p.m.: Clinical Evening. Members are invited to bring Specimens, Cases, or Plates.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. Keith. (Museum Demonstration.)

Appointments.

COOKE, H. W., L.R.C.P.Lond., M.R.C.S., Resident Obstetric Officer at the Bristol Royal Infirmary.

ESKELL, BERTIE CECIL, M.B., Ch.B.Bristol, Honorary Assistant Anæsthetist at the Bristol Royal Infirmary.

HENDERSON, JOHN, M.D., Ch.B.Glasg., F.R.F.P.S.Glasg., Professor of Medicine in St. Mungo's College, Glasgow.

KAY, C. W., L.R.C.P. and S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory and Workshop Acts for the Lymington District of the county of Southampton.

KERR, ROBERT ANDREW, M.B., B.Ch., B.A.O.Belf., House Surgeon at the Bristol Royal Infirmary.

O'SHAUGHNESSY, E., L.R.C.P. and S.Edin., L.F.P.S.Glasg., Certifying Surgeon under the Factory and Workshop Acts for the Broadford District of the county of Limerick.

PARKER, GEORGE, M.D.Cantab., Sole Lecturer in Forensic Medicine and Toxicology at the University of Bristol.

SALISBURY, W., M.B., B.S.Lond., House Surgeon at the Bristol Royal Infirmary.

SNODGRASS, J. E., M.B., Ch.B.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Raphoe District of the county of Donegal.

SPENCER, GORDON WINSTANLEY, M.B., B.C.Cantab., L.R.C.P.Lond., M.R.C.S., House Physician at the Bristol Royal Infirmary.

STATHAM, REGINALD SAMUEL SHERRARD, M.D., Ch.B.Bristol, Registrar to Special Departments at the Bristol Royal Infirmary.

STRATON, ARTHUR A., M.B., B.S.Lond., Clinical Assistant to the Chelsea Hospital for Women.

Vacancies.

Manchester Schools for Mothers.—Medical Officer. Salary £250 per annum. Applications to the Hon. Secretary, Medical Sub-committee, 339 Oxford Road, Manchester.

Down District Lunatic Asylum.—Junior Male Assistant Medical Officer. Salary £130 per annum, rising by annual increments to £150 per annum, with full board, washing, apartments, and attendance. Immediate application. (See advt.)

Mercer's Hospital.—Hon. Visiting Physician. Applications to the Registrar. (See advt.)

County Borough of Belfast.—Chief Tuberculosis (Medical) Officer. Salary £600 per annum. Applications on or before October 23rd to the Town Clerk. (See advt.)

Northampton County Asylum, Berry Wood, Northampton.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to Medical Superintendent.

Wakefield General Hospital.—Second House Surgeon Salary £100 per annum, with board, lodging, and washing. Applications to the Hon. Secretary, Clayton Hospital, Wakefield.

Lewes Victoria Hospital.—Resident Medical Officer. Salary £120 per annum, furnished apartments, board, coal, gas, washing, and attendance. Applications to the Hon. Secretary.

Leyton, Walthamstow, and Wanstead Children's and General Hospital.—Resident House Surgeon. Salary £100 per annum, with rooms, board, and washing. Applications to James Bird, Secretary, The Hospital, Orford Road, Walthamstow, N.E.

Bury Infirmary.—Junior House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to the Hon. Secretary, Infirmary, Bury, Lancs.

North Lonsdale Hospital, Barrow-in-Furness.—Junior House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to the Secretary.

Hereford County and City Asylum.—Junior Assistant Medical Officer. Salary £200 per annum, all found. Applications to the Medical Superintendent, The Asylum, Burghill, Hereford.

Births.

FRANKLIN.—On September 15th, at Wadhurst House, Newington Green, London, N., the wife of Reginald Franklin, L.R.C.P.Lond., M.R.C.S.Eng., of a son.

GAYNER.—On October 8th, at Red Hill, Surrey, the wife of Dr. Francis Gayner, of a daughter.

SARGENT.—On October 9th, at 20 Harley Street, W., the wife of Percy Sargent, F.R.C.S., of a son.

Marriages.

ATKINSON—SHIELD.—On October 7th, at Holy Trinity, Paddington, Dr. Arthur William Atkinson, M.B., C.M., son of Dr. James Atkinson, M.R.C.S., L.R.C.P., J.P., Mirion House, Crewe, to Winifred, daughter of William Shield, M.Inst.C.E., Clapham Common.

GIBSON—KENNEDY.—On October 4th, at St. Matthew's Church, Ealing Common, Alfred John Gibson, M.B., B.S., of Brentwood, Essex, son of Alfred Gibson, Esq., to Elma Mary, only daughter of C. Fred Kennedy, Esq., Madely Road, Ealing.

GOFF—GARRETT.—On October 8th, at Woodburn Hamilton, John Goff, M.D., Bothwell, to Sophia, youngest daughter of James Garratt, of Dundalk, Ireland.

PEARCE GOULD—RHYS-GRIFFITHS.—On October 8th, at the Parish Church of St. John the Baptist, Cardiff, Hugh, eldest son of Sir Alfred Pearce Gould, K.C.V.O., M.S., of 10 Queen Anne Street, London, to Enid, elder daughter of Dr. and Mrs. Rhys-Griffiths, of 50 Newport Road, Cardiff.

Deaths.

DIXON.—On October 9th, at Oulton Lodge, Oulton Broad, Ellen, the beloved wife of William Edward Dixon, F.R.C.S.

GOURLEY.—On October 4th, at Linden Villa, Gosforth, Harry Harte Gourley, M.D.Durh., L.R.C.P. and S.Edin., L.F.P.S.Glasg.

JACKSON.—On October 10th, John Lowthian Jackson, M.D., of Hedon, East Yorks, aged 53 years.

RITCHIE.—On October 6th, suddenly, at a Nursing Home, Glasgow, John Ritchie, M.B., C.M., in his 51st year, Lt.-Colonel R.A.M.C., of 6 Glenan Gardens, Helensburgh, beloved husband of Marion Weir Burden Ritchie.

SWALLOW.—On October 11th, at his residence, Clifton Lodge, Clarence Road, Clapham Park, S.W., James Dodd Swallow, M.D., in his 78th year.

WATSON.—On October 5th, at Ladysmith, Cape Colony, Robert Walker Watson, M.R.C.S., second son of the late John Watson, of Dyers' Hall, E.C., and of Mrs. Watson, 42 Manor Road, Beckenham, Kent.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, OCTOBER 22, 1913. NO. 17.

NOTES AND COMMENTS.

Paying Patients in Voluntary Hospitals.

THE announcement that some of the empty wards at Charing Cross Hospital are to be thrown open to paying patients raises the old discussion as to the economic justice of such a proceeding. From the point of view of the management of the hospital the step is justifiable in the interests of the public as well as of the institution. Some years ago the Board took upon its shoulders an enormous additional responsibility in the extension and rebuilding of its premises. Its finances are still staggering under a heavy burden of debt. Under such circumstances it is only natural that the management should look round for some means of filling empty wards, and at the same time of increasing funds. What readier means could be at hand than to follow the example of such wealthy and influential hospitals as Guy's and St. Thomas's—not to mention many institutions of lesser note—who receive paying patients? The grievance about the abuse of hospitals is one of old standing, and it was raised mainly against the *gratis* treatment of all kinds of minor ailments in the out-patient department of the voluntary charities, regardless of the ability of the patients to pay the fees of the outside private practitioner. For some time past the agitation against hospital abuse has died away, and there is no reason to suppose that it would be raised again against the system of payment for in-patients, especially as the profession had tolerated for so long the competition of hospital private wards of Guy's and St. Thomas's.

Is the Pay System Legal in Hospitals?

THE pay wards make a bid for patients of a class that do not frequent out-patient departments. They are able to pay two or three to six guineas a week, and often, in addition, to pay the fees of the superintendent of the "Home," or of the member of the staff who may attend them. A bald statement of the situation is that the private practitioner loses a valuable patient owing to the competitive bid of the hospital. As to the legal aspects of the transaction, it seems not unlikely that an injunction could be obtained against any hospital that devoted its funds to the purpose of making money out of patients. The matter would hinge on the exact wording of the constitution of the hospital concerned. If there were any clause permitting it to trade—for that is the net result of the pay system—upon funds given for the definite purpose of the relief of the sick poor, any protest could be safely disregarded. It may be doubted, however, if any great voluntary charity has such a proviso in its rules and regulations. From a single legal standpoint, to apply charitable funds to the making of profit is a malversation—to use the jargon of the lawyers. Were there any body of medical practitioners strong enough and united enough to raise the point, it seems probable that an injunction could be obtained in the High Courts restraining Charing Cross or any other voluntary medical charity from receiving patients' payments. Query: Does a voluntary charity cease to be a charity when it takes monetary payments for its services—and what about the subscribers whose money was contributed definitely for other purposes?

The Supporters of the Pay System.

THE managers of a hospital receiving payments for in-patients would in all probability deny indignantly that they were competing with outside medical practitioners. It would be very interesting to learn by what process of reasoning they would support that denial. The reasons advanced by the supporters of the pay system are for the most part general and evasive. It would be interesting to get a brief statement of their position from some authority on the matter—such as Sir Henry Burdett—who has been a life-long protagonist of the pay system. The chief points which should be clearly dealt with are the competition with the outside medical profession, the diversion of voluntary subscriptions, the desirability of medical men attached to the charity, either in a salaried or honorary capacity, acting as medical attendants upon private paying patients. What has the Board of Charing Cross Hospital to say about the matter? What are the views of the King Edward and the Metropolitan Hospital Sunday and Saturday Funds? Have they any definite policy? Surely if they have accepted so heavy a responsibility as the distribution of money given for purely charitable purposes they ought to have decided views as to its application in alien directions. Considering the huge sums that are raised annually for the medical charities, it is a matter of regret that some of the largest and wealthiest of those insitutions should seek to add a relatively small sum to their incomes by adopting a system which can never be anything but distasteful to a large proportion of the medical profession.

Prosecution of Queen's Square Hospital.

THE control of cinematograph performances is clearly a right and proper proceeding in the interests of the public safety. The occurrence of fire or explosion has on various occasions thrown audiences into a panic with disastrously fatal results. There comes an element of Rabelaisian humour, however, when the whole artillery of administrative law is directed against a private cinematograph demonstration to the learned members of the International Congress of Medicine. Such an anti-climax has fallen upon the Secretary of the Queen's Square Hospital for the Paralysed and Epileptic. It was contended by the police prosecutor that the premises of that famous hospital had been used in contravention to the regulations made by the Secretary of State under the Cinematograph Act, 1909. It was proved in evidence that the films were inflammable; there were three exits to the room, but they were not specially indicated; the apparatus was not enclosed, and the films were not kept in a metal box. The defence pleaded in vain that the demonstration was attended solely by post-graduate students and members of the Congress, and that it was not an ordinary performance. It was contended that the case came within the terms of the Sub-section which stated that the Act did not apply to a cinematograph performance in a private dwelling house to which the public were not admitted. The magistrate, however, said he could not hold the performance was given in a private dwelling, and inflicted fines and costs amounting in all to £8 5s.

Southwark versus Camberwell.

A truce appears to have been called for the time being between the adjoining Councils of Southwark and Camberwell. Possibly the advent of October, and the consequent lessening of the flies, furnishes an explanation of the silence. Southwark may be congratulated on having joined the ranks of the health enthusiasts, especially with so good a case as the conveyance by flies of germs from Camberwell's filthy railway trucks of refuse, placed within a stone's throw of her neighbour's infirmary. The lame defence, apparently good enough for the Local Government Board, is that there is no direct proof of the fatal cases of enteritis in the infirmary being due to the Camberwell garbage! By the way, where is the coroner for the district? Has he held inquests upon the cases, and, if so, with what result? Southwark might get evidence enough even to satisfy Mr. John Burns from a series of inquests. The cases should be carefully, fully, and deliberately investigated in open court, and the opinion of the jury taken as to the part played by the Camberwell refuse, the flies, the enteritis, the local authorities concerned, and the L.G.B.

LEADING ARTICLES.

MEDICAL MEN AND LAY NOTICES.

The unwritten laws of the medical profession have gradually become fashioned into a code that plays an important part in the control of ethical conduct. From the circumstances of the case they cannot be reduced to any form of accurate expression, a fact that clearly leaves the door open to a widely differing interpretation of underlying principles. It may be well, therefore, in view of the individual injustice that may follow the unequal application of our ethical laws, to consider briefly some of their bearings upon contemporary medical life. For this purpose the old-standing condemnation of lay notices whether in the form of circulars, notices of strictly medical work in the public newspapers, or in various other direct and indirect ways. The General Medical Council has sternly set its face against direct advertising, and has punished many a club doctor for sending round circulars in a new district. The Council may be invited to express an opinion in set terms upon the ethics of newspaper notices, as, under present circumstances, the practice of the medical profession is simply chaotic. To take an instance, the daily newspapers throughout the United Kingdom contained notices of many of the papers read recently before the British Medical Association at Brighton. The public learned in their columns the views of Dr. So-and-so upon the value of sea bathing, of another provincial physician on alcohol in the treatment of diabetes, and so on and so forth. As a matter of fact, reporters from the leading lay newspapers were present at the sectional meetings by the invitation of the Association itself. They could be present only for one purpose—namely, to send a description of the proceedings to the lay journals of which they were the representatives. In many of the sections they discharged that function efficiently, as may be seen by consulting contemporary files of the London daily newspapers. In certain other sections the reporters were refused all information and promptly ejected when their presence was discovered. Without expressing any view as to which was the right course, it is clear that if the reporters were there by invitation of the Association they were sent to report the proceedings. If it were right to report one section it could hardly be wrong to report another. It may be assumed that the Association by issuing press tickets to leading lay journals implied tacit approval of the publication of sectional reports in public newspapers. If so, on what logical grounds could such reporters be denied information in other sections? A better instance of chaos in unwritten medical law it would be difficult to imagine. Another example may be found in the recent manifesto against syphilis signed by a great many well-known members of the medical profession. If a single medical man were to issue a public declaration regarding some particular malady, and were to sign it with his name, address and qualifications he would probably incur a considerable amount of censure. If he happened to be an inconspicuous figure in the professional world he would run a risk of being ejected from his scientific societies and from other professional bodies, and might even engage the attention of the General Medical Council. His act, indeed, would run full tilt against the traditions that have hitherto governed medical ethics. But how can that which constitutes a heinous offence in the individual be lessened or condoned by the collective publication of a group of names? In the *Morning Post* of July 2nd, 1913, was published the above-mentioned manifesto against syphilis signed by 38 members of the medical profession. In each case, one of the chief posts held by the signatory is appended to the name. We thus have the Presidents and Past-Presidents of the Royal Colleges of London and Ireland, University Professors in London, Cambridge, Belfast, Oxford and Dublin, Presidents and Ex-Presidents of the British and Irish Medical Associations, Surgeons to the Middlesex, University College, National Hospital for the Paralysed and Epileptic, to the Skin Department of the Seamen's Hospital, St. Bartholomew's, the London Lock Hospital, Guy's, the Consulting Physician for Diseases of Women to the Royal Free Hospital and so on. Scotland is represented by the Physician for Diseases of the Skin in the Royal Infirmary of Edinburgh. There can be no doubt as to the importance of the document, but why could it not have been issued under the authority—say, of the Royal Colleges or the Royal Society of Medicine. After such a step taken deliberately by so many eminent members of the medical profession, it would be inconsistent to blame any medical men of lesser light and leading who henceforth may see fit to air their views upon this or that professional matter in the columns of lay newspapers even if they append thereto any professional title or appointment. The manifesto in question constitutes in point of fact a frank abandonment of former traditions, which forbade a medical man from citing his professional posts in such a connection. Henceforth, it will hardly be surprising if a rapid extension of this innovation ensue. There is keen rivalry in all branches of the profession, and it is hardly likely that the rank and file will allow themselves to be outdone in so simple a matter as addressing the public, individually or collectively, through the medium of the lay Press. This subject is noticed in these columns with an entire absence of feeling, or even of absolute conviction as to how far it is justifiable to go in this matter of public medical statement. The legitimacy or otherwise of signed medical communications and of authorised notices in lay journals should preferably be settled one way or the other, so that impartial justice may be meted out to all members of the profession. Either let the practice be condemned, and put an end to once and for all, or let us accept with philosophical resignation those freer relations with public journalism which have been frankly adopted in some foreign countries.

CURRENT TOPICS.

Research in Mental Disease.

The desirability of carrying out carefully-controlled scientific observations in cases of mental disorder is gradually becoming recognised by most up-to-date workers in psychiatry. The older methods of treating the insane by withholding from them the practical benefits of experimental science no longer applies at the present day. Well in the front of the new movement for research in mental disease has been the City of Cardiff Mental Hospital, the fifth annual report of which for the year 1912 shows a scientific record of which any alienist might well be proud. Owing to the energy of the Medical Superintendent, Dr. Edwin Goodall, assisted by his staff who have caught his spirit of enthusiasm, several important researches have been carried through, more especially with regard to the relation between the Wassermann reaction and the blood and cerebrospinal fluid in mental disease. The results of these experiments go to show that a higher proportion of positive reactions in the blood-serum is obtained in cases of florid syphilis (including cases in the second stage) than in those of general paralysis. Further work has been in the direction of observing the agglutinating and opsonic properties of the blood serum in cases of acute mania and melancholia upon the intestinal anaerobes, *B. putrificus* and *B. enteritidis sporogenes* (Klein). The work shows that no agglutin is formed in respect of these organisms, and that such cases exhibit a lower opsonic index than do control cases. Dr. Goodall puts forward a strong plea for the appointment of a third research worker, *viz.*, a physiologist, at as early a date as possible, in order that difficult problems connected with metabolism may be elucidated. It is satisfactory to note that the high importance of the development of the scientific side of the hospital is fully appreciated by the Commissioners in Lunacy and also by the Committee of Visitors of the Hospital.

Newgenics.

Professor Karl Pearson has been writing to the *Times*. He is protesting against the popularisation of eugenics. A serious subject is being reduced to the level of a pantomime gag. Galton, who founded eugenics, suggested two steps forward consummating his ideal of improving the human race. One step was to find out how it was to be done, and the next was to interest the people and get them to do it. The halfpenny press has reversed his scheme. No one yet knows how it should be done, but everyone talks about it and some even try to put the unknown scheme into practice. Spasmodic States in America are turning out scrappy legislation, and here in England we can read about "eugenic" marriages and "eugenic" babies. For many purposes the fine idea of race betterment has become comparable with those conveyed by lodgers, kippers and a mother-in-law. This is probably because there is a tinge of sex about problems of heredity. Music hall comedians and lady novelists cannot keep away from it. "White Slave" novels have had their day, and now "eugenic" stories usurp their place in sensuous shilling covers in the less savoury bookshops. Professor Pearson's way of bringing his Frankenstein's automaton under control is by changing its name. He thinks the prying journalistic nose would miss eugenics if called "race-hygiene" or "genetics." Knowing the journalist we do not agree. The idea that eugenics is a fit subject for prurient humorists will have to be lived down. The fault is with the founders of the movement. They realised that publicity was necessary to the success of their theories, but that was no reason why they should perfect their publicity first and their theories afterwards.

Pediculosis Capitis Amongst School Children.

School medical officers and others engaged in the work of medical inspection of school children know full well the extent to which pediculosis prevails. It is positively appalling to see the gross neglect that occurs day by day whereby children, whose heads are in a state that can only be termed filthy are allowed to mix freely with others. Indeed, the testimony of the medical officers of most hospital out-patients' departments shows that a head absolutely free from nits, especially in women and girls, is quite the exception. Dr. Jacob Sobel (*a*), in a paper read at the Fourth International Congress on School Hygiene, at Buffalo, New York, last August, showed that while all other communicable diseases of the skin were on the decline, pediculosis capitis alone remained practically stationary. After eleven years of personal experience, Dr. Sobel concludes that the disease is essentially a problem of the home. In other words, it is little use trying to combat verminous heads without attending to the condition of those at home, and especially to the disinfection of combs, brushes, linen, etc. Written instructions regarding treatment are useless, whereas personal supervision and the co-operation of teachers and parents will go a long way to ridding poor children of what can only be called a standing disgrace to any civilised community. In New York the disease was more prevalent among the alien population. In London and most large cities in Great Britain, pediculosis is pretty well distributed among the children of the poor. Crude petroleum or kerosene, diluted to half-strength with olive oil, is recommended for dealing with moderately severe cases, and the mechanical removal of all nits by the careful application of sand-paper or by fine combing, is said to be better than acid solutions. Whatever means be adopted for cleansing the heads, it is imperative that re-infection should not take place.

The Medical Waiting Room.

Let us try and look at it from our patients' point of view. On a visit to his physician, the first place where the unhappy man has time to look about and pull himself together, is the waiting-room. There he tries to pick up his courage, and there he picks up his impressions of the Rhadamanthine autocrat in the next room. He hears mysterious voices and sometimes the trickling of a fluid that he fervently hopes is water—but he is not quite sure. To distract his attention from all the grisly possibilities that beset him he picks up a paper. We all know the papers. If we don't we need only go into the next room and see. There are antediluvian *Punches* and weekly illustrateds of the month before last and some 4½d. magazines that claim to be as good as the sixpenny ones. They are a dull crowd and rather crushed and soiled. It does not give a good impression. A visit to one's doctor for an ordinary man is an apprehensive time. He doesn't do it every day, and he always wants to "hear the worst." Let us put him in a fit state for what, to him, is an ordeal. A few current numbers of decent journals will make a man at home sooner than a table littered with dingy remainders. And there is one tip that is worth the trouble. Two minutes and a pot of paste will stick the cover and a couple of advertising pages together. The result is quite a good cover that will last as long as it is wanted, and that is till the next number of the magazine comes out.

Bread and Water Diet.

Most of us can remember the days when our unrighteous little souls were vexed by being relegated to the upper regions of the house, away from bright lights and company, and fed with the humiliating, yet quite wholesome, fare of bread and water. We emerged from the ordeal, sadder and wiser, no doubt, but who will say that this bread and water of affliction had not some chastening effect upon our digestion as well as upon our morals? Not even the choicest Vienna roll and the most sparkling table-water appeals to the imagination of Mr. D. Blackley, L.C.C., who submitted a special motion condemnatory of the practice of feeding refractory children with bread and water in the special schools of the London County Council at the meeting of the London Education Committee last week. It was stated that in a certain school of 34 children, there were in 13 weeks 15 cases of bread and water punishment. In the discussion which followed, it was pointed out that neither corporal punishment nor solitary confinement was now tolerated, and that discipline must be maintained in some form among refractory school children. Perhaps we may soon hear of forcible feeding having to be adopted among these young pickles! No harm can possibly accrue to a healthy child by keeping him on bread and water for 24 hours or so, though it would not be advisable to deprive him of those proximate principles of food which are conspicuously absent in such a diet for any longer period.

Examinations and Research.

Some interesting questions are raised by Sir William Osler's recent lecture on "Examinations, Examiners, and Examinees." The examination has been for more than one generation something of a fetich, though it is not so great a fetich as it was a few years ago. We now recognise its limitations as a test, and we try to supplement it by information gained from other sources as to the candidate's record, work, and ability. This is all for the good, for however competent the examiner—and a quite large proportion of examiners are definitely incompetent—an examination is not an adequate test of a man's knowledge and capability. Sir William Osler's suggestion to put greater stress on research work in the awarding of the higher professional qualifications has been vigorously challenged by Sir Rickman Godlee, and with the

---

(*a*) *New York Medical Journal*, October 4th, 1913.

challenge we have a good deal of sympathy. There is grave danger of research work becoming itself a fetich, and at the present time much labour and energy is misdirected into channels which lead to no result, either in the form of knowledge or of improved capability. We must proceed slowly.

Desperate Remedies.

THE fatal case of anthrax, referred to in our columns last week, in which salvarsan had been administered, illustrates once more the limitations of modern drug-therapy. It was most unfortunate that the patient's kidneys were not equal to the task of eliminating the salvarsan after it had already completed its bactericidal work. No signs of chronic Bright's disease were present, it is stated, during life, or else, of course, all idea of salvarsan injection would have been abandoned. The evidence of Dr. T. M. Legge, medical inspector of factories, at the concluding stage of the inquest, should go far to reassure future sufferers from anthrax, for he dwelt very fully upon the present position of our knowledge of the action of salvarsan in anthrax for the special benefit of the jury. The researches of Dr. Eurich, bacteriologist to the Anthrax Investigation Board, make it practically certain that salvarsan is the remedy *par excellence* for anthrax, because it possesses an extraordinary selective power of attacking the bacilli, both in human beings and in animals. It would be a pity if one fatal case, acknowledged to be desperate before the injection was given, were allowed to prejudice medical men, as well as the public, against the use of so selective, if dangerous, a remedy. It is, therefore, satisfactory to note that the jury found that the injection of the drug was rightly and properly carried out.

Medical Inspection of Chauffeurs.

THE desirability of a medical examination of chauffeurs does not need much arguing, once the facts of the case are realised. Several instances have been recorded of automobile drivers being found dead at their post. Recently in London the sudden unconsciousness of a motor driver led to a terrible collision. It is a self-evident proposition that the safety of the public may be seriously endangered at any moment by the sudden failure of a physically defective chauffeur. It is simply a matter of commonsense precaution, therefore, that any candidate for a licence to drive any kind of automobile should be required to pass a medical examination before being granted a certificate. At Leicester a few days since an inquest was held on the body of a chauffeur who fell down in the street and died from heart disease. The Coroner very properly pointed out that the case showed the real necessity for a medical examination of motor drivers. Had this man been driving in the busy streets of the town at the time of his death the consequences might have been serious. There is urgent need for some drastic legislation not only in this but in various other points concerned with motor traffic. The death toll in town and country has long since reached breaking strain. It is to be hoped that the Government will be induced to turn its attention to the whole matter before many moons have passed.

PERSONAL.

DR. T. B. HYSLOP delivered the Presidential Address before the Chelsea Clinical Society last night on "Clinical Psychiatry."

DR. R. C. BROWN, of Preston, has presented the Preston Grammar School, of which he was a former pupil, with a fine organ.

SURGEON-GENERAL SIR R. HAVELOCK CHARLES will present the prizes at the Royal Army Medical College, Grosvenor Road, on October 29, at 4 p.m.

SIR M. M. BHOWNAGGREE has presented to the London School of Tropical Medicine a medal to be competed for annually in memory of the late Dr. Cawas Lalcaca.

DR. J. W. NOBLE, M.D., B.C.Cantab., M.R.C.S., L.R.C.P., has been appointed Medical Superintendent of the County of Durham Sanatorium at Holywood Hall, Wolsingham, Co. Durham.

MR. W. F. BROOK, F.R.C.S., has been elected Consulting Surgeon and life Vice-President of the Swansea General Hospital upon his retirement from the active staff after twenty years' service.

MR. J. D. MALCOLM, M.B.Edin., F.R.C.S.Edin., of London, has been awarded the Liston Victoria Jubilee Prize of £100, awarded by the Royal College of Surgeons of Edinburgh, for his investigation into the causes of shock.

ACTING-SURGEON A. M. HENRY, of Guy's Hospital, has been awarded the gold medal for the best total of marks obtained on entry at Greenwich and Haslar, and also a prize for the highest marks at the Greenwich examination.

THE MAHARANEE HOLKAR OF INDORE visited the Hampstead and North-West London Hospital last week, and, after inspecting the wards and the operating theatre, gave a donation of £25 for the purchase of an additional instrument cabinet.

AT a meeting of the Council of the King Edward VII. Welsh National Memorial held at Shrewsbury last week, Dr. Gaffikin, Belfast, Dr. J. H. P. Graham, Wallasey, and Dr. Evan D. Richards, London, were appointed Assistant Tuberculosis Physicians.

SIR ALFRED PEARCE GOULD, K.C.V.O., Dean of the Medical Faculty of the University of London, will preside in the Post-Graduate College, West London Hospital, on Thursday, October 30th, at 5 p.m., when an address will be delivered by Sir Gilbert Parker, M.P.

A COMMEMORATIVE tablet was unveiled last week at Livingstone Cottage, Hadley Green, Barnet, where Dr. Livingstone stayed in 1857 while he wrote an account of his African travels. The ceremony was performed by Mrs. Livingstone Wilson, the only surviving daughter of Dr. Livingstone.

IN succession to Sir W. Watson Cheyne, the retiring president of the Medical Society of London, Sir David Ferrier has been elected to fill the office at the annual meeting of the members. The other officers who retired were re-elected, and after the presidential address a paper dealing with facial spasms and their treatment was read by Dr. E. Farquhar Buzzard.

THE Brighton Board of Guardians last week by a large majority decided to appoint a consulting and operating surgeon for the workhouse infirmary at a fee of 100gs. per annum. This is the outcome of a deputation from the local division of the British Medical Association, who urged that Poor Law cases should no longer be treated at hospitals or other charitable institutions.

CLINICAL LECTURE
ON
PESSARIES VERSUS OPERATIONS IN THE TREATMENT OF UTERINE DISPLACEMENTS. (*a*)

By ARTHUR E. GILES, M.D., B.Sc., F.R.C.S.,

Surgeon to the Chelsea Hospital for Women; Gynæcologist to the Prince of Wales's General Hospital, Tottenham.

IN former days displacements were not treated except by the means of pessaries; and the only question to exercise the mind of the practitioner related to the kind of pessary that he was to use. Certainly, this was a large question, if we may judge from the number and variety of pessaries figured and described in the text-books of the day. Most intruments and inventions, when obsolete, are ignored and forgotten; but pessaries appear to be cherished by surgical instrument manufacturers, whose catalogues, when these appliances are concerned, read like a catalogue of museum specimens.

In the last twenty years the ingenuity of gynæcologists has been diverted from the invention of new pessaries to the devising of operations for the relief of displacements. At the beginning of this surgical era, the indications for the use of pessaries were numerous, and the indications for surgical intervention were very few. The progress of surgery in the direction of improved *technique* and diminished mortality has led to a steady encroachment of surgical procedures on the domain of pessaries, and it does not require a seer to foretell that in the course of time the original conditions will be reversed, and the indications for surgical treatment will be numerous, and the indications for pessaries will be few.

Of course, I am referring to the attitude of the profession as a whole; for just as, at any given time, there are always some ardent spirits whose ideas are in advance of their day, so there are always cautious and conservative people who lag a generation behind. In this, as in other matters, we find exemplified the proposition enunciated by the late James Hinton, that "truth lies in the polar union of opposites."

I wish now to define the relative scope of the indications for pessaries and operations from the standpoint to which my own experience has led me. Without entering upon debatable questions of ætiology and pathological anatomy, I shall include under the term "displacements" retroversion and retroflexion of the uterus, prolapse of the uterus and vaginal walls and procidentia. Moreover, since some backward displacements of the uterus cause no symptoms and are, therefore, best left alone, I may add that my observations refer only to cases in which symptoms are present from which patients must be relieved.

From the point of view of treatment I recognise three groups of displacements:—

(*a*) Cases in which there is a clear indication for pessary treatment.

(*b*) Cases in which there is a clear indication for operation.

(*c*) Optional cases, in which the patient should have both courses explained to her, and be allowed to choose.

Such divergence of opinion as is found on the subject has reference primarily to the position of the boundary lines between these groups.

A.—Cases in which there is a clear indication for pessary treatment.

In this group I should include the following cases:—

(1) Retroversion of the uterus following confinement. In many of these cases there is a temporary relaxation of ligaments and loss of tone; and the wearing of a Hodge pessary for a few months will usually bring about a cure.

Let me note in passing that when I speak of a cure in connection with displacements, I mean that the parts remain in their normal position when the pessary has been removed.

(2) Retroversion of the uterus occurring in young and nulliparous women, when the symptoms of displacement are of recent origin, and the uterus fails to keep up after simple reposition. In such cases I think that it is always advisable to try the effect of a Hodge pessary in the first instance, and give it a year's trial if necessary.

(3) Retroversion of the gravid uterus, in the early months; this is the class of case in which the patient often seeks relief on account of impaction of the retroverted uterus and retention of urine. It is usually sufficient for the pessary to be worn for six or eight weeks.

This is the only kind of retroversion in which I prefer a ring to a Hodge; the primary necessity is to keep the uterus raised up, for if raised it will not fall backwards. In cases of retroversion of the unimpregnated uterus I have hardly ever known a ring to correct the displacement. In all cases of backward displacement it is an indispensable condition that the displacement should be corrected before the pessary is introduced.

(4) Prolapse of the uterus, with or without cystocele, when the perineum is sufficiently good to hold a ring well up. If the ring is well borne, and does not readily get rough or set up vaginitis, and if it relieves the symptoms, it may be worn for a considerable time with periodical inspection; particularly if the patient is single or a widow.

(5) Cystocele without prolapse, with the same proviso as above, that the perineum is sound. Sometimes a ring answers very well; in other cases a specially-shaped pessary may be adopted, the upper end of which is like a Hodge, whilst the lower end is widened and curved forwards so as to lie behind the pubes and above the levatores ani.

(6) All kinds of mobile displacement when the condition of the patient is such as to contra-indicate operation. In this category I should include some cases of displacement in old women; although, if the patient's general condition is vigorous, I should not consider age in itself to be a bar. I have had some very satisfactory cases of operative treatment for displacement in women over seventy.

Whilst I am on the subject of pessaries, I should like to call your attention to a few popular delusions:—

That the vagina was designed by Nature as a receptacle for a pessary.

That the introduction of a pessary is good treat-

(*a*) A lecture delivered at the Medical Graduates' College and Polyclinic, October 1st, 1913.

ment as a placebo when one does not know what else to do.

That a Hodge pessary may be expected to succeed when the retroversion has not first been rectified with the fingers or sound.

That a ring is a suitable pessary for a backward displacement.

That the size and fit of a pessary are unimportant.

I now pass on to my second group.

B.—Cases in which there is a clear indication for operation.

In this category I should include the following :—

(1) All cases of backward displacement in which the uterus is fixed by adhesions, so that its position cannot be rectified. To insert a pessary in such a case is merely to add risk to inefficiency.

(2) Backward displacement complicated by ovarian tumours or inflammatory disease of the appendages. It may be said that in such a case the ovarian tumour or tubal disease, and not the displacement, is the indication for operation. With this I quite agree, but the points upon which I lay stress are that it is futile in such a case to treat the displacement by pessaries; and that when the abdomen is open one should use the opportunity to sling up the uterus if the operative conditions allow of this being done.

(3) Backward displacement complicated by one or more fibroids admitting of myomectomy. Here the fibroids may, in certain circumstances, be considered as the indication for operation; but there are also cases in which the fibroids might not be regarded, in themselves, as calling for immediate interference, and I should then regard the double condition as a clear indication for a combined myomectomy and hysteropexy.

(4) Mobile retroversion associated with a torn perineum that requires repair. While the patient is under the anæsthetic, it is a simple matter to open the abdomen and deal with the uterine displacement; it does not add materially to the operative risk; it takes very little longer; and the patient is saved from the necessity of subsequent pessary treatment.

(5) Retroversion associated with an atrophic condition of the upper part of the vagina in such a fashion as to render pessaries ineffectual.

(6) Prolapse of the uterus and vaginal walls, when the perineum is so torn or stretched that no ordinary pessary will keep in place.

(7) Total procidentia, with the vagina inverted and the uterus lying outside the vulva; particularly when associated with ulceration of the vagina due to friction of the clothes. In such cases the vaginal outlet is nearly always so stretched that pessaries fail to keep in place; and, moreover, if a pessary can be induced to stay in, it will nearly always cause excoriation and ulceration of the damaged vaginal wall.

(8) All cases of displacement when the patient is going to reside abroad in districts where medical assistance is not readily available.

(9) All cases of displacement in which a pessary rapidly perishes or becomes rough, or leads to profuse or offensive discharges, or causes inflammation or ulceration of the vaginal walls. I have met with such cases when the patient was absolutely miserable without a pessary, and yet had to do without it at frequent intervals because it was so badly borne. There has then been an alternation of (1) relative comfort, but associated with offensive discharge; and (2) freedom from discharge but with attendant discomfort and inability to retain urine when walking, coughing, or straining in any fashion.

(10) Cases of displacement in neurotic single women, on whom the concentration of attention on the pelvic organs, incidental to the wearing of a pessary, frequent douchings and periodical examinations, has a harmful mental and moral effect.

C.—Optional cases, in which the patient should have both courses explained to her, and be allowed to choose.

I place in this group cases of uncomplicated displacement, in which a pessary answers quite well as regards keeping the displacement corrected and the patient comfortable, but does not bring about a cure. As soon as the pessary is removed, the displacement returns. Consequently, there is before the patient the prospect of many years of pessary treatment. Now *à priori* one would expect, and from experience of many such cases I can testify that to many women such a prospect is abhorrent. They do not want to be constantly reminded of the existence of their internal organs; the periodic examinations are distasteful to them; the constant douching necessary to keep a pessary clean is nothing short of a nuisance, and they accept with surprising alacrity the suggestion that they may undergo an operation to rid them of this great incubus in their life. In this class we find married women of some years' standing, young married women, to whom a pessary appears as a barrier between them and their husbands, and their hopes of happy maternity, and single women, to whom every examination is a veritable ordeal.

I maintain that in the past the requirements of these patients have not been adequately met; they have had to put up with an objectionable treatment, or "grin and bear" their pains and discomforts unrelieved. If we can open to them a door of relief and bar it in their face, we fail in our duty. There is a perfectly fair parallel in the case of hernia in men. If a man with a hernia came to us and said that he did not wish to wear a truss, but preferred to undergo a radical cure, even though he realised the slight risk attendant on this procedure, we should without hesitation put him in the way of obtaining his wish. The wearing of a truss by a man is a far slighter hardship than the wearing of a pessary by a woman. The only valid argument against operative treatment of displacements as a matter of election would be one that could demonstrate that the operative risk was excessive, or that the results were bad. The risk in these days is very slight. I have published my results fully from time to time. In my first 10 years I had three deaths in 64 cases, all from broncho-pneumonia. In the last 10 years I have had three deaths in 509 cases, one from diabetic coma, one from oral sepsis, and one from pneumonia. I submit that these figures would compare not unfavourably with any series of 500 cases of radical cure of hernia. As regards the later results of operation, I have reported from time to time the after histories of my own cases. The latest report was in the discussion at the Royal Society of Medicine, in March of this year, when the total number of cases traced amounted to 373, a larger number than those reported so far in the practice of any other operator. The figures are large enough to make the deductions from them trustworthy; they showed: (1) that in 90 per cent. of cases the general condition of the patient was much better than before operation; (2) that in 96 per cent. of all the cases, and in 98 per cent. of the later ones, the displacement was permanently cured; (3) that 62 confinements had followed the operation; with two more natural confinements that I have recently heard of, the number is now 64, in none of which has there been any complication that could be attributed to the operation; (4) that the uterus had maintained its good position, in spite of pregnancy and labour, in 97 per cent. of cases; (5) that the patients had been free of bladder disturbance, or had no more than before operation in 85 per cent. of cases, 20 per cent. having actually improved.

From the facts given it is clear that any argument against the operative treatment of displacements, based on the assumption that the operative mortality was high, or the after-results bad, would fall to the ground.

One speaker, in the discussion referred to, expressed the opinion that these operations were being done much too frequently. Such a position is as unsound as religious intolerance. The cure of a patient is the one aim of medicine and surgery; and if one man finds that he gets the best results from one method, and another finds that he is most successful using another method, neither has the right to say of the other that he is not justified in using his method, or to impose any limitations as to how often he may use it.

The correct attitude is to keep an open mind; to adopt such methods as appear to be giving the best results; and to abandon those methods whose results are inferior. Success in treatment is the final arbiter in all therapeutic measures; and I am convinced by experience that in the treatment of uterine displacements they will meet with the greatest success who recognise that pessaries, while they have their place, have also their limitations; and are prepared to avail themselves of the resources of surgery in suitable cases.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Dr. Froelich, Professor Agrege in the Faculty of Medicine, Nancy. Subject: "Is it Necessary to Operate in Spina Bifida?"*

ORIGINAL PAPERS.

THE MEDICAL TREATMENT OF PEPTIC ULCER. (*a*)

BY THOMAS R. BRADSHAW, M.D.DUB., F.R.C.P.LOND.,
Senior Physician to the Liverpool Royal Infirmary.

THE class of case to which the following remarks apply is one which is familiar to every practitioner. The patients are mostly women; their age is generally somewhere between puberty and menopause; they come to us with symptoms which are almost monotonous in their uniformity. They all tell us that the taking of food is followed by severe pain; they mostly tell us that the pain ends in vomiting; the majority tell us that at some time during their illness the vomit has contained blood. On examination we find some evidence of impaired nutrition, though a marked degree of emaciation is rare; there is a moderate degree of anæmia, and if there has been much loss of blood it may be very pronounced. Examination of the abdomen with eye and hand reveals nothing abnormal, except perhaps some hyperæsthesia in the epigastrium; with the fear of exciting hæmorrhage before our eyes, we dare not attempt to elicit further information by the use of the stomach tube or the bismuth meal. The materials for making a diagnosis are scanty; the need for a provisional diagnosis—a working hypothesis at least—is urgent. The question presses—Is there or is there not ulceration of the stomach or duodenum, that is, of the regions exposed to the action of the acid gastric juice? Now before we can frame an answer we must be agreed as to what we mean by an ulcer. The old definition of ulcer, "Breach of continuity with loss of substance," will serve us well enough. Now, given a free discharge of blood from the surface of a mucous membrane, who will venture to deny the existence of a breach of continuity in that membrane? Apart from clean incised wounds which we have not to consider here, I fail to see how such a breach of continuity can arise in a mucous membrane without the destruction of some, at least, of the superficial structures of that membrane. The occurrence of hæmorrhagic erosions has been invoked to explain hæmatemesis apart from ulceration; but a hæmorrhagic erosion is neither more nor less than a breach of continuity with a small loss of substance, and Sir William Osler with his usual precision and conciseness lays it down that there is no difference between hæmorrhagic erosion and the acute form of gastric ulcer. I submit, therefore, that in all cases in which there is or has been gross bleeding into the stomach or duodenum are or have been suffering from ulceration of one of these organs, or to use the most convenient and comprehensive term, that they are or have been the subjects of peptic ulcer.

But the absence of obvious signs of hæmorrhage in the vomit and the stools by no means excludes the possibility of ulcer. The presence of pain and vomiting of a certain kind in a patient with a history of antecedent hæmorrhage points to the possibility of existing ulceration; pain and vomiting even where no history of hæmorrhage can be obtained may by themselves be so strongly suggestive of the presence of peptic ulcer, as to call for the exercise of the same precautions and the employment of the same treatment as we should adopt if the presence of ulceration were proved to demonstration.

The treatment I have employed during the past three years in cases of peptic ulcer of the kind I have described has been on the lines laid down by the late Professor Lenhartz of Eppendorf, Hamburg. The first essential of this, as of all rational methods of treating peptic ulcer, is, I need hardly remind my hearers, rest of mind and body, as nearly absolute as can be obtained. The distinctive feature of the Lenhartz method of treatment is that the preliminary period of complete abstinence from food, tempered it may be by the so-called rectal alimentation, is dispensed with, and as soon as the patient comes under observation, the administration of small quantities of highly albuminous food at frequent intervals is begun.

My method of carrying out this line of treatment is extremely simple and is as follows:

The patient is put to bed, is not allowed to sit up or make any exertion, and must be fed by the nurse. As soon as possible the administration of raw eggs mixed with milk is begun. The exact quantity may be varied somewhat according to the special features of the case, but my usual practice is to order a pint of milk and one egg to be taken during the first twenty-four hours, two ounces of the mixture being given every two hours, and two feeds being omitted during the night. Next day the quantity of milk is increased to a pint and a half, and on the third day a second egg is added. The amount of nourishment is rapidly increased daily by the alternate addition to the diet of one egg and half a pint of milk, until the patient is taking three eggs and three pints of milk daily,

---

(*a*) Paper read at the Section of Medicine International Congress of Medicine, London, August, 1913.

always in divided portions every two hours. This full amount is usually maintained for three or four days, and then fish is ordered and a gradual return is made to ordinary food. In a few cases in which hæmorrhage had been very recent and abundant, or the patient's condition seemed to be more than usually grave, I have ordered one-half the usual quantity of nourishment to be given during the first twenty-four hours, and have increased the amount more gradually. I have thought that a wise precaution to adopt, though I am by no means sure that it is necessary. As a rule no medicine is required.

During the last three years I have carried out this treatment in the case of thirty patients in my women's ward, patients who presented symptoms pointing to peptic ulcer. In fifteen of these there had been hæmatemesis, often profuse, within a week of the patient's admission to hospital. In eight in which there had been no recent hæmorrhage, there was a history of hæmatemesis or melæna at some time more or less remote; in only seven of the cases was there no record of hæmorrhage at any time. As a rule, almost without exception, as soon as the patients were put to bed, and fed in the way I have described, the pain and sickness subsided. There was never any accident, all the cases made a complete and uninterrupted recovery; the average time they spent in hospital was 23.2 days, the longest being 40 days and the shortest 9 days. The last patient had had melæna, and had fainted, 10 days before admission. She left the hospital, apparently well, at her own request, the day after she was put on low diet with fish. Of the 15 cases which had had hæmorrhage within a week of admission the average stay in hospital was practically the same as that of the whole series, namely, 24 days, the longest being 33 days and the shortest 14.

With few exceptions the patients showed no dislike to the diet, the pain ceased after one or two days, the vomiting did not return. In only one case was there a recurrence of hæmatemesis after the milk and egg regimen had been established. The patient, a few days after her admission to hospital, was allowed to see her husband who was going to sea. He arrived at the ward in a state of intoxication, the patient was much agitated by the visit paid under such circumstances, and soon afterwards vomited blood. She ultimately made a good recovery, and left the hospital after forty-one days. I have not, however, included her case in my statistics, because owing to the distressing circumstances I have mentioned, the essential condition of mental and bodily repose was at first not maintained.

The treatment I employ differs in some minor details from that laid down by Professor Lenhartz, and differs chiefly in the direction of simplicity. Thus I do not have the food iced, nor do I apply an ice bag to the epigastrium. I seldom order uncooked meat in the course of the treatment, and I do not prescribe bismuth unless the pain persists, which is rarely the case. I have had but few cases in my men's ward conforming to the type of peptic ulcer which I have described. In my experience, peptic ulcer in men as met with in the wards of a hospital is generally of a chronic type, and when it comes under observation has already produced such deformity as to call for surgical interference. Still I have had a few cases in which the treatment I have described has appeared to me to be indicated and the results have been highly satisfactory. It will probably be objected that many of the cases which I have described were not the subject of gastric ulcer at all. As I have already suggested, we are probably not all in agreement as to the meaning of the term ulcer in this connexion, but I think that whatever our definition of ulcer may be, we shall all admit that the majority of my cases were suffering from that condition.

I need hardly point out that the mode of treatment I have described cannot be expected to lead to recovery in old cases that have gone on to the production of stenosis or other structural changes in the stomach. Such cases are pre-eminently suitable for surgical interference, and their successful treatment by operation is amongst the most brilliant of the triumphs of modern surgery. There are, however, not a few cases where the physician is in doubt as to whether the ulcer has gone on to the production of cicatricial changes or not, and in them the egg and milk treatment can be used with much advantage until the diagnosis is fully established.

I submit that this treatment compares very favourably with the other forms of medical treatment in vogue. It does not tend to increase the anæmia and exhaustion already present, it is free from the discomfort and distress incident to the withholding of food and the administration of nutrient enemata, it has no special drawbacks of its own, and does not favour the occurrence of hæmorrhage or perforation, it is not costly, it leads to early relief of pain, and is followed by rapid restoration to health.

LICHEN PLANUS. (*a*)

By DAVID WALSH, M.D.Edin.,
Senior Physician, Western Skin Hospital, London, W.

Amongst diseases of the skin lichen ruber planus—to use its fuller title—is certainly not the least interesting and important. Its history affords a good illustration of the general advance of dermatology, while at the same time it reminds us somewhat sharply of the limitations of knowledge with regard to the causation and various other essential facts connected with so well recognised a condition. The study of *lichen planus*, indeed, is stimulating to dermatologists not only because of what we have already learnt, but even more so because of what is not yet known. The disease occurs often enough to enable most private practitioners and all dermatologists to become familiar with its features. The following brief systematic outline of the malady will serve to suggest a few of the points to which discussion may be specially directed.

Definition.—Lichen ruber planus is an inflammatory condition of the skin of obscure origin, usually chronic, characterised by small, firm, dry, reddish or lilac, itching, flat-topped, angular or polygonal, non-scaling papules, involving all layers of the skin (sometimes mucous membranes), and leaving more or less prolonged pigmentation after recovery, which takes place as a rule in a few months or years without serious impairment of health.

History.—Lichen planus was formerly regarded as a form of dry, papular eczema, and it was only in 1869 that Erasmus Wilson described it as a separate condition, under the name of lichen planus. About the same time it appears to have been identified by Hebra as lichen ruber. The name usually adopted by dermatologists nowadays is that given to the condition by Wilson. It is not one of the common affections of the skin: according to Crocker (*b*) it forms in dermatological practice 1 per cent. of hospital and 2 per cent. of private cases. The fact of its comparatively recent differentiation is somewhat curious, for in the majority of instances it presents sharply marked characters. Its rarer varieties may now and then elude the vigilance of even skilled dermato-

---

(*a*) Paper to open discussion read (in abstract) before the New London Dermatological Society at the Western Skin Hospital, October 9th, 1913.

(*b*) Radcliffe Crocker, "Diseases of the Skin," vol. i., p. 379.

logists, while in its ordinary, well-marked, chronic form it gives rise to constant errors of diagnosis in private practice.

L. planus may be acute or chronic. The great majority of cases are chronic.

The chronic form usually comes on insidiously and appears in crops of papules, which may last for months or years. It may remain as discrete papules, or these may run together into patches, near which typical papules are invariably to be found. The tendency to run into patches is most marked in the knees and legs, or round the body where there is pressure. The patches show a lilac colour and are often imperfectly scaled.

The essential feature of lichen planus is the flat, firm, angular papule, which retains its form throughout the attack, does not weep nor become pustular, and does not extend at the circumference. As a rule it itches, and in some cases may give rise to aggravated discomfort. Its colour is usually pale or dull red to purple; this colour cannot be all squeezed out by pressure. Its size is from a pin-point to that of a hemp seed. Its shape is angular, corresponding to the natural lines of the skin. It rises abruptly from the skin and has a flattened top, which is sometime umbilicated, due probably to the centre being tethered, as it were, by a sweat duct. Its colour may be pale pink, but is more usually red or lilac. It has a peculiar translucent or waxy, glistening or shiny look, which can be best seen by looking at the eruption slantwise. The shiny appearance is due to the stretching of the thickened, horny layer of the epidermis by the underlying papule. Sometimes the papule heals in the centre and becomes annular, or papules may run end to end in a circular or horseshoe or linear form. To the touch the papules are firm and rough.

A remarkable point is the pigmentation left after the clearing up of the papules. This may be of any shade of brown, from a faint staining to a deep, blackish hue, which in marked cases persists for months or years. At times the macule is faintly cicatricial.

Itching varies: it is not always present, although in the majority of cases it presents a marked symptom. It may be slight, or it may be so severe as to prevent sleep, and even seriously affect the health of the patient.

The patches are formed by the running together of individual papules. In the legs they are often covered with scanty scales, and there is a good deal of hypertrophy, so that the condition somewhat resembles psoriasis—indeed, the late Sir Jonathan Hutchinson long ago called the condition lichen psoriasis.

[Several sketches of lichen patches resembling psoriasis on the legs were shown. In each case there was a history of traumatic origin in patients suffering from heart disease, in which a patchy, chronic lichen planus eruption developed and generalised.]

The distribution of the disease is interesting. It affects by choice the fronts of the wrists, the inner sides of the thighs, and the lower parts of the legs, also the back of the neck. It often occurs on the trunk, and may affect every part of the body, rarely the scalp, palms and soles, and in extremely rare instances the face. The papules may be arranged in lines, and may follow the course of a nerve. An interesting point is that of traumatism. The papules sometimes appear along the lines of scratching, or they may be caused by pressure, such as that of a garter or of the clothes around the waist. This latter observation suggests that the surface circulation may be concerned in the determination of the rash, and that parts where there is local circulatory or lymph stasis due to pressure may be predisposed to the lodgment of some specific pathogenic micro-organism. In this connection a patient is shown here to-day. Her age is 65, and she has chronic lichen planus with pretty general distribution of discrete, shiny, red itching papules, the size of hempseeds, of a month's duration. She has advanced valvular disease, and is one of several cases where lichen planus has been found associated with cardiac disease.

Case of Lichen Planus.—C.F., æt. 65, cook, came first to hospital complaining of an irritating rash on arms and legs, which began on the lower limbs six months previously. As a girl, she had scarlet fever and "brain fever." For the last 25 years she has suffered from "colds" and bronchitis. She has palpitation, shortness of breath, and dyspepsia. Her feet swell and she has habitual constipation. The pulse is 100, compressible, and regular. There is an aortic direct murmur, conducted into sub-clavian and carotids. The apex is felt in fifth and sixth interspaces. Cardiac dulness extends half an inch outside the left mid-clavicular line. The eruption is that of a typical lichen planus. On the arms it shows as numerous discrete, shiny, firm, red papules.

Lichen planus is usually symmetrical. It often attacks the mucous membranes, and is seen on the tongue and inner lining of the cheeks, but rarely in the fauces, in the form of whitish lines or patches. It is supposed to affect the rest of the alimentary canal in a similar way, and to account for the dyspepsia and diarrhœa that sometimes accompany the malady.

Acute Lichen Planus.—Sometimes the disease develops acutely. The papules are like those of the chronic form, but cover a greater surface, and there is more scaling and more intense itching. Every part of the body except the face may be involved. A good deal of pigmentation follows the disappearance of the eruption, and recovery as a rule is comparatively rapid, although some attacks lapse into the chronic form of the disease. Sometimes the patches of chronic lichen planus develop a warty growth. There is usually considerable thickening of the skin, and painful cracks and fissures occur. As in various other skin affections the warty element may be regarded as a sort of pathological accident. In extremely rare cases vesicles or bullæ may develop on the lichen planus papules as patches. Other infrequent variations have been described.

Ætiology.—Lichen planus attacks adults of both sexes and occurs among all classes of society Little is known as to its predisposing and determining conditions. The disease appears, as a rule, in patients of apparently good health, although in many instances a history of nervous troubles is present. From the consistency of the eruption and its well-defined features one is inclined to believe that lichen planus is possibly due to a specific micro-organism. From the fact that in its typical form it presents a chronic inflammatory condition of a granulomatous type, an analogy has been traced with the gummata of syphilis, and it has been suggested that a spirochæte may be the cause of the mischief.

The neurotic element is undoubtedly present in many cases of lichen planus, as evidenced by history of shock, tremors, headaches, and other signs of nervous instability.

Pathology.—Microscopically, the characters are constant. Both superficial and deep layers of the skin are involved, and the process is generally believed to begin in the papillary layer of the corium. There is overgrowth of the principal layer, and, according to some observers, especially of the stratum granulosum, with thickening of the horny layers. The papillæ are elongated, and with the underlying corium, are packed with a dense cellular inflammation. The healing centre in annular lichen planus resembles the similar process in some syphilitic and tubercular eruptions.

Diagnosis.—The diagnosis in well-marked cases is easy so long as the character and grouping of the planus papules are borne in mind. Chronic, scaly, planus patches on the legs are often mistaken for psoriasis: they may be distinguished by their imperfect scaling, their itchiness, their bluish look, the invariable occurrence of satellite planus papules, their non-appearance on the elbows and knees, and, in my own opinion, by the common association of some grave circulatory defect.

Perhaps the commonest mistake in diagnosis is the confusion of lichen planus with papular eczema. The latter disease is multiform and catarrhal, and a careful examination would show that the rash was not uniformly papular. Lichen planus is sometimes mistaken for an early secondary papular syphilide: the syphilitic rash does not irritate, it is multiform, and there are other evidences of the disease: there is a patchy tertiary rash rather like lichen planus, but it usually shows more or less scarring, which lichen planus does not. At times the planus papules, especially if few in number, escape notice, and the patient is treated for the pruritus, which may be general and severe.

Prognosis.—Some cases recover after a few weeks or months, but the chronic case may persist for years, especially the patchy form on the legs. The general health is rarely seriously affected. Sometimes the itching may prevent sleep and so injure the health, or there may be gastric symptoms and diarrhœa.

Treatment.—Itching is one of the most troublesome symptoms. Antipruritic remedies, such as sponging with a lotion of carbolic acid and spirits of camphor, is useful; rest in bed and opiates may be necessary. Individual patches may be painted over with salicylic collodion. Of all internal remedies, arsenic receives the most general support. Good results are often obtainable from the liquor hydrargyri perchloridi. Personally, I never use arsenic, but begin at once with the liquor, which appears to exert a more or less specific effect upon the disease. X-ray treatment is sometimes useful, and the patches often disappear under some form of electrical current. Recently lumbar puncture has been advocated by Raval, of Paris. In our own country, Pernet has reported a case of lichen planus in which severe pruritus disappeared a few hours after its application, but the treatment seems rather heroic for what is, after all, a purely subjective symptom that can as a rule be alleviated by milder measures.

Local Treatment plays a minor, but still an important part in dealing with this complaint. Unna uses the following formula:—

Ac. carbol. pur., gr. xx.
Hydrarg. perchlor., gr. i. or iii.
Ungt. zinci benzoat., oz. i.
M. ft. ungt.

It is sometimes useful to apply carbolic acid or other drugs in collodion, which is painted over the patches. Tar is a good remedy and may be used in the form of liquor carbonis detergens; resorcin, or as liquor picis carbonis, painted over the papules. Cyllin, salicylic acid, and, generally speaking, remedies used for psoriasis, are available for lichen planus.

POLIO-ENCEPHALITIS AND POLIO-MYLETIS. (*a*)

By FREDERICK E. BATTEN, M.D.Cantab., F.R.C.P.Lond.

Physician to the Hospital for Sick Children, London, and Physician to the National Hospital for Paralysis and Epilepsy.

Since the International Congress of Medicine met in Budapest in 1909, great advance has been made with regard to our knowledge of polio-myelitis and polio-encephalitis. It is true that in December, 1908, Landsteiner and Popper had succeeded in communicating polio-myelitis from human being to monkey; but all the knowledge which we now possess with regard to the nature of the virus has been furnished by the experimental work of Landsteiner and Levaditi, Flexner and Lewis, Leiner and Wiesner, Roemer and Joseph, and many others during the past four years, and I feel sure that I express the feeling of this section in saying how greatly we regret that Professor Flexner and Professor Roemer have been prevented from opening the discussion on this subject, as was announced in the earlier programmes of the transactions of this Section.

It was only in May of this year that I was asked to perform the task of opening this discussion, and I feel greatly the honour which this Section has done me, and trust that they will forgive many shortcomings which might have been avoided had longer time been given me for preparation.

I take it that it is the duty of the reporter to place before the section a *résumé* of the recent work which has been done on the subject under discussion, and to bring into prominence those points on which some difference of opinion exists. This I shall endeavour to do; but the subject of polio-myelitis and encephalitis is so vast that the consideration of any one part might occupy the whole of the time at my disposal. I propose, therefore, to deal with (1) the experimental work; (2) the clinical types of the disease; and (3) the disease as it affects England and this metropolis.

Experimental Work.

In 1908 Landsteiner and Popper succeeded, by means of an injection into a monkey of the substance of the spinal cord taken from a case of acute polio-myelitis, in producing a disease which both clinically and pathologically was quite analogous to that occurring in human beings. They did not succeed in transmitting the disease to a series of monkeys.

In 1909 Knöpfelmacker produced the disease in a monkey by injecting into the peritoneum an emulsion of the spinal cord from a case of polio-myelitis, and in the same year Strauss and Hontoon, in America, also produced polio-myelitis in a monkey by intraperitoneal injection.

Towards the end of 1909 there came the communications almost simultaneously of Flexner and Lewis, Landsteiner and Levaditi, Leiner and Wiesner, and Roemer, showing that the infection could be transferred from one monkey to another by means of an emulsion of the spinal cord. Then followed a series of experiments as to the nature of the virus.

It was shown by Landsteiner and Levaditi and by Flexner and Lewis that the virus of polio-myelitis was a *filterable virus*, and would pass the Berkefeld, Chamberlain, Reichel, and Pukall filters: but that after such a passage through the filter the virus lost some of its virulence, and the incubation period was always prolonged.

It was also shown by these observers that the virus may be *preserved* for many months in pure glycerine or 50 per cent. of glycerine in water, without affecting its virulence. In this respect the virus resembles that of rabies and vaccinia. The organism will withstand prolonged *drying*, so that material dried at 22° C. for twenty-four days was still virulent.

The cultivation of the organism has up to the present not been definitely accomplished. Small round and oval corpuscles have been described under the ultramicroscope, and quite recently Flexner and Noguchi have described a medium and method of growth under anaerobic conditions. They describe minute colonies of globular bodies averaging .15—.3 of a micron in size. These bodies stain a pale reddish violet in Giemsa solution. Monkeys inoculated with the cultures have developed typical polio-myelitis, but the authors are evidently fully aware of the possibility of the carrying over of a quantity of the original virus sufficient to cause paralysis in the inoculated monkeys, and further experiments are in progress to prevent such an occurrence.

Experimentally it was found that the most certain *method of infecting monkeys* was by injecting .5 c.c. of an emulsion of an infected spinal cord into the brain, and at the same time injecting 4—5 c.c. into the peritoneal cavity. Subcutaneous and intravenous injections are, however, frequently successful in producing the disease. The virus will pass the uninjured nasal mucous membrane, and will also penetrate the intestinal mucous membrane, as has been shown by Leiner and Wiesner. The earlier experiments failed to demonstrate the presence of the virus in the saliva and secretions of the mouth and nose, although Flexner and Lewis have shown that the virus was present in the mucous membrane of the nose. The transmission of the disease by means of the blood was also difficult, and Flexner and Lewis only succeeded by using large quantities (25 c.c.) taken from the monkey at the height of the disease. Leiner and Wiesner only succeeded in one case out of six attempts in producing infection by means of the blood. Shortly it may be said that the virus exists in the central nervous system, in the mucous membranes of the nose, in the tissue of pharynx, in the lymphatic glands, rarely in the salivary glands, and still more rarely in the blood; but it could not be proved to be present in

---

(*a*) Read before the Section of Diseases of Children, International Congress of Medicine, London, August, 1913.

the buccal, pharyngeal, nasal *secretions*, or in the fæces.

The great epidemic of polio-myelitis in Sweden, in 1911, gave the observers Kling, Pettersson, and Wernstedt the opportunity of a thorough investigation. They obtained washings from the mouth, nose, pharynx, upper air passage, and small intestine of a number of patients: (1) dead of the disease; (2) living cases; (3) abortive cases; (4) healthy persons in contact with infected individuals. Washings from these mucous membranes obtained (1) *after death* were filtered through a Heims filter, and by a combined intraperitoneal injection with an inoculation into one sciatic nerve of the filtrate they succeeded in infecting monkeys. Out of fourteen patients dead of polio-myelitis, thus investigated, in only one were the authors unsuccessful in demonstrating the presence of the virus of polio-myelitis. It is, however, interesting to note that the changes in the spinal cord, which have been considered most characteristic of polio-myelitis, *i.e.* cellular infiltrations, were not always present. In fact out of 59 monkeys, which were infected from typical cases of polio-myelitis, 25 (*i.e.* 42 per cent.) showed infiltrative changes, and 34 (*i.e.* 58 per cent.) degenerative changes.

The degenerative changes have been noted in the cells of the supporting tissue, and also in the ganglion cells into which the large clear surrounding glia cells have eaten their way. These observers consider these changes to be due to, and characteristic of, the effect of the virus of polio-myelitis. The proof that these are cases of polio-myelitis lies in the fact that control experiments made with the spinal cord have produced quite typical perivascular infiltrations and leucocytic neuronophagia.

2. *Living Cases of Polio-Myelitis.*—Having obtained results from persons dead of polio-myelitis, the authors next proceeded to investigate the secretions from living persons, and they obtained material from the mouth, nose, pharynx, and large intestine of twelve living persons suffering with polio-myelitis. In only one case did the observers fail to infect the monkeys. Thus the presence of the microbe has been detected in the secretions of one of the examined membranes, *i.e.* mouth, nose, upper air passage or intestine, in 24 cases out of 26 cases. Considering the difficulty in infecting monkeys in every instance, the observers consider themselves fully justified in drawing the following conclusion, viz. that the virus in all probability is always present in the mucous membranes of the nose, mouth, pharynx, and intestine of persons affected by polio-myelitis during the acute stage of the disease.

3. *Abortive Cases, and* 4. *Healthy Persons in Contact with Infected Individuals.*—Having obtained results from persons suffering with definite polio-myelitis, the authors proceeded to investigate the washings from the mucous membranes of abortive cases and healthy persons. In a family of five, one of whom had definite polio-myelitis, two an uncertain illness of short duration, and two had remained well, they showed that three carried the microbe of polio-myelitis in their mucous membranes, viz. the one who had distinct paresis, one of those who had an abortive attack, and one of those who had had no illness.

The existence of the micro-organism of polio-myelitis has been demonstrated also in the secretion from the mouths of three persons, who had not, as far as is known, had any contact with patients showing definite paresis, persons whose illness was characterised by such vague symptoms that only in one case did the suspicion arise that some form of polio-myelitis was present. The virus of polio-myelitis has been demonstrated in perfectly healthy individuals living in the neighbourhood of cases of polio-myelitis. Out of a family of five, one of whom had polio-myelitis, three were shown to be virus carriers. In six families the experimental method has demonstrated the existence of carriers of the virus in several members of the family, only one person in each family having typical paralysis. It is therefore probable that virus-carriers are very common.

HOW LONG MAY THE VIRUS REMAIN IN THE MUCOUS MEMBRANES.

Osgood and Lucas found it still present six months after an attack. The Swedish observers state that virulent organisms were present in the buccal secretion seven months after the onset of the disease.

That the virus with which these observers were dealing was that of polio-myelitis is proved by a variety of experiments.

The observers also took washings from the mucous membranes of five healthy individuals, and injected them into monkeys. No infection took place.

EXPERIMENTAL INVESTIGATIONS WITH THE OBJECT OF DETERMINING THE POSSIBILITY OF TRANSMISSION OF POLIO-MYELITIS BY MEANS OF DEAD OBJECTS AND FLIES.

Flexner and Lewis, Landsteiner and Levaditi and Roemer found that prolonged drying even for twenty-four days at a temperature of 22° C. did not diminish the virulence of the virus. Leiner and Wiesner, however, found that drying of the film for four hours at a temperature of 37° C. did destroy the virus. Landsteiner, Levaditi, and Pastia found that the virus remained potent in sterile milk and sterile water for at least thirty-one days. Josefson succeeded in producing experimental polio-myelitis with a handkerchief and fancy work. Neustaedter and Thro succeeded, after may failures, in producing polio-myelitis in a monkey with a filtrate of macerated dust collected from rooms in which cases of polio-myelitis had been nursed. Howard and Clark showed that the domestic fly can carry the virus of polio-myelitis in an active state for several days upon the surface of the body, and for several hours within the gastro-intestinal tract, and that the bed bug has taken the virus with the blood from infected monkeys and maintained it in a living state within the body for a period of seven days. Rosenau in 1912 demonstrated that polio-myelitis could be transmitted from monkey to monkey by the means of the bite of the stable fly (*Stomoxys calcitrans*), and this observation has been confirmed by Anderson and Frost. These experiments are the more remarkable for it is a matter of some difficulty to infect a monkey with the blood of a patient suffering from polio-myelitis, and as a rule a considerable quantity is required. Kling, Petterson, and Wernstedt failed to communicate the disease by the means of fleas.

THE CLINICAL PICTURE OF EXPERIMENTAL POLIO-MYELITIS IN MONKEYS.

The clinical picture of experimental polio-myelitis in monkeys as described by Landsteiner and Levaditi, Flexner, Lewis and others is similar to that which occurs in man. In addition to the ordinary type of limb paralysis, the muscles of the face, the oculomotor muscles are paralysed, sometimes alone, sometimes in association with limb paralysis, and Roemer has reproduced the "jump" type in monkeys, which is a rare manifestation in man. In view, however, of the pathological finding of Kling, Petterson, and Wernstedt, who stated that a considerable number of their cases show degenerative changes, it is important to study the clinical picture in their cases. That the clinical picture of experimental polio-myelitis may in animals other than the monkey vary greatly is shown by Marks in his experiments on rabbits, and Leiner and v. Wiesner have described a type of slowly progressive weakness in monkeys which they have designated as "marasmic."

Kling, Petterson and Wernstedt have divided the 116 monkeys who suffered from polio-myelitis into six clinical groups: (1) an upper, (2) lower, (3) mixed, (4) cerebral and bulbar type, (5) general muscular weakness, (6) "found dead." The first four groups are so well known and correspond to the usual type in man that no comment is necessary. With regard to the general muscular weakness which the authors use as synonymous with the "marasmic type" of Leiner and v. Wiesner, it has no known counterpart as a clinical type in man.

The feature of this "general muscular weakness" group is weakness without localised paresis, and the authors state that they have found the disease manifesting itself in this manner in no less than 26 out of the 116 cases.

A monkey (No. 140) inoculated on November 1st was noticed on November 16th to be more slow in its movements. By November 20th it moved somewhat joltingly, but otherwise well, possibly weak in the fore limbs. November 25th: Has during the past days been huddled up in one spot, and to-day is lying at the bottom of the cage and moves very little. It died on this evening. Microscopical examination showed marked hyperæmia and hæmorrhages, but no cellular infiltration. Some of the glia-cells distinctly enlarged. The ganglion-cells generally dark and rather homogeneous, some of them being besides shrunken and vacuolated, enlarged glia-cells often having eaten their way into them, the changes, however, on the whole, not very pronounced. The clinical picture differs considerably from that which is usually accepted as that of polio-myelitis, as do also the pathological findings. The question might well be asked: Is this disease polio-myelitis? The experimental proof on this point is complete; for the animal was infected from another animal which gave the typical clinical and pathological picture.

The Histological Changes in the Spinal Cords of Monkeys Affected by Polio-myelitis.

Kling, Petterson, and Wernstedt describe two distinct pathological conditions in the monkeys dead of polio-myelitis.

(1) The infiltrative type, the pathological picture commonly presented by the spinal cord of monkeys in connection with experimental polio-myelitis.

(2) The degenerative type, in which cellular infiltration is absent and the striking change is degeneration of the nerve-cells. This degeneration affects not only the nerve-cells, but also the cells of the glia. The authors describe in fact two degenerative types. The one in which the ganglion-cells are encroached upon by a large number of cells which are polymorphonuclear leucocytes and poly-blasts, the poly-blasts being, according to Wickman, the real neuronophages. The second, in which a cell having a large clear rounded cell-body, eats its way into the ganglion-cell. This the authors designate as "glia-cell neuronophagia."

An important point is the proportion between the cases in which infiltrative and degenerative changes have been observed in experimental animals. These figures show that animals inoculated from virulent cases give a far greater percentage of infiltrative cases than those inoculated from abortive and convalescent cases.

	Animals dead.	Infiltrative.	Degenerative.
(1) Typical cases	59	25 (42 p.c.)	24 (58 p.c.)
(2) Abortive and virus carrier	34	1 (3 p.c.)	33 (97 p.c.)
(3) Convalescents	23	2 (8 p.c.)	21 (91 p.c.)

The greater virulence and the appearance of the inflammatory infiltration evidently go hand in hand in the monkey. The authors come to the conclusion that the degeneration of the ganglion-cells as well as the cellular and humoral exudation are to be regarded as the result of a direct injurious influence of the virus.

This is a new light in which to regard the action of the virus of polio-myelitis, for in the past the changes in the nerve elements have been regarded as secondary to the infiltration of the tissues. Further experiments are necessary to confirm or disprove the view expressed by these authors. This question will be further discussed from the clinical aspect.

The Swedish epidemic of 1911 greatly exceeded the epidemic of 1905. In the month of September, 1911, more cases occurred (viz., 1,067) than in the whole of 1905, the total number for 1905 being 1,016; for the year 1911 being 3,840. From topographical studies, the investigators conclude that the epidemic of 1905 produced a general and widespread immunity to polio-myelitis, for the areas which were affected in 1905 practically escaped in 1911.

Clinical Manifestations of Polio-myelitis and Polio-encephalitis in Man.

Everyone will now recognise that the virus of polio-myelitis may affect any portion of the nervous system, and may thus give rise to a variety of clinical pictures. These have been described by Wickman under the following types:—(1) The spinal type, (2) the ascending and descending, so-called Landry type, (3) the bulbar and pontine type, (4) the encephalitic type, (5) the ataxic type, (6) the neuritic type, (7) the meningeal type, and (8) the abortive type. Peabody, Draper and Dochez, in their excellent investigations on the clinical features of polio-myelitis, criticise this classification, saying that it is based neither on pathological anatomy nor on clinical symptomatology, but on a mixture of the two. They prefer the classification suggested by Müller on anatomical basis—viz., (1) the spinal form, (2) the bulbar form, (3) the cerebral form, (4) abortive cases; but even here one has to introduce a clinical division (abortive cases) with the anatomical. I do not propose to discuss at length the various clinical manifestations to which an infection by polio-myelitis virus may give rise, but there are certain types of the disease which are not commonly recognised, and it is to these that I should call special attention.

The cerebral type, to which Strümpell first called attention in 1885, giving rise to hemiplegia, is to a certain extent called into question by Peabody, Draper and Dochez, and they point out that Wickman, who, in the Swedish epidemic in 1905 had the opportunity of seeing many cases, did not see any definite cerebral case of this nature. They record an instance of sudden onset of left hemiplegia in a child which suggested the diagnosis polio-encephalitis, and in whom the blood serum, mixed with the acute specific virus, failed to prevent the infection of a monkey, and therefore the case was probably not one of infection by acute polio-myelitis.

Several instances of hemiplegia in one member of a family in whom other members are affected with typical polio-myelitis have been recorded, and hemiplegia in association with typical polio-myelitis in the limbs is on record; but it must be admitted that the pathological evidence on this type of the disease is not complete.

The acute ascending type of polio-myelitis is more generaly recognised, but the "jump" type, in which the disease remains stationary for several days and then rather suddenly and rapidly advances is by no means so generally recognised.

The bulbar type not infrequently escapes recognition. In this form the stress of the disease falls upon the bulb and gives rise to inability to swallow, to paralysis of the palate and tongue, to cardiac irregularity and great dyspnœa owing to the failure of the diaphragm and respiratory muscles. The mouth becomes filled with frothy saliva, which the child is unable to swallow. The child is intensely restless, acutely conscious, and irritable. Respiration becomes an active, voluntary process and every breath represents hard work. The clinical picture is one which is so striking that when once seen it is never forgotten, and apart from polio-myelitis is only seen in deaths from myasthenia gravis and probably in rabies, although of this latter condition I cannot speak from personal experience.

The cerebellar type is characterised by acute ataxia either unilateral or bilateral, and such ataxia may be seen in association with a typical flaccid paralysis of a limb or of one side of the face in the same patient, or in another member of the same family. Most observers will, however, accept the above types as manifestations of polio-myelitis, but few will be willing to accept the so-called "neurotic form," and it is this form which I propose to discuss in the light of recent research. If the presence and persistence of pain are taken as evidence of "neuritic type" of the disease, then it may be asserted that there is no justification for the title, since both these symptoms are well recognised accompaniments of affection of the spinal cord. If, however, there is evidence of weakness and wasting of peripheral muscles which affects all the extremities more or less symmetrically, and at the same time there is definite alteration of sensation in the peripheral portion of the limbs, with tenderness of the muscles, then it would be justifiable to regard such a case as one of neuritis. If such a case occurred with a sudden onset, or in association with typical cases of polio-myelitis in other members of the same family or household, it would be justifiable to assume that the same poison was the causative factor.

Wickman discusses this question at some length and quotes the following case:—A child, four years old, is taken suddenly ill on August 12, 1905, with headache, pain in arms and legs. On August 15th the arms and legs are paralysed; pain all over the body. On August 16th, attack of shortness of breath. On August 19th, better; could move the left arm over the head, and the following day improvement maintained. On August 24th, attack of shortness of breath again. Increase of symptoms. Pain in the legs and arms. The sensibility of the lower extremities is markedly affected. The patient feels nothing below the knee, and only strong stimuli on the thighs above the knee. The sensation of the abdomen, thorax, and upper extremities is maintained. The child slowly improved, and on September 6th the sensibility of the lower extremities had returned; but the child was discharged on October 15th with typical paresis of the legs and right shoulder.

This case had certain symptoms which seem to point to an affection of the peripheral nerves, and was associated with the usual symptoms of a polio-myelitis.

Polio-myelitis, as a rule, has an acute stage which subsides after a period of a few days, and recovery gradually takes place. Rarely, however, after a variable period recurrence takes place, the paralysis extends and may prove fatal. Such a type, which has been named the "jump" type, has been observed in experimental animals by Roemer. Such cases must not be confused with cases exhibiting poly-neuritis. As evidence that polio-myelitis may produce toxic poly-neuritis the following cases may be quoted:—

James F., æt. 16, a milk boy. In July, 1910, he had some pain in both legs. On Saturday, July 30th, he was taken acutely ill, and vomited for three days. Had pain in the abdomen and legs. Remained in bed. On Wednesday, August 3rd, he could not stand, and after that the legs gradually got weaker, and after a few weeks he was absolutely unable to move them, and he could not feel below the knees. He was in bed for two and a half months, and after the seventh week in bed his legs began to get better; the arms were never much affected. He came under my care in November, 1910. He had then weakness of the arms, feeble grasp, generalised wasting. The trunk muscles were good. The legs were wasted below the knee; he had double foot-drop, absent knee-jerks, absent ankle-jerks. Electrical changes of the character of R.D. were present in the muscles of arms and legs. Loss of sensation had cleared up when seen in November, 1910. There was no evidence of lead or arsenic. He recovered under treatment and was discharged well in January, 1911.

The case was obviously one of toxic neuritis. The only question was, what was the nature of the toxin? The sudden onset of symptoms during the month of August suggested the virus of polio-myelitis as the cause; the proof could only be furnished by experiments on animals, and that was not done.

A.L., æt. 30, was, early in May, 1913, taken suddenly ill with weakness of the legs, so that she could hardly walk when she attempted to get out of bed in the morning. She had been perfectly well the night before. She had a squint at this time. Since the onset the legs have been steadily getting worse, and when seen some four weeks after the onset there was bilateral foot-drop, tenderness of the muscles, loss of sensation to all forms below the knee, weakness of the hands, and some slight anæsthesia. The knee-jerks were absent. The clinical picture was clearly one of peripheral neuritis. What the toxin was must remain doubtful; but the sudden onset followed by the gradual increase of symptoms suggests the possibility of the virus of polio-myelitis as the cause. Complete recovery took place.

The third case is that of a boy, E.H., æt. 5 in 1898. He was taken ill acutely at the end of August or beginning of September, 1898. He was feverish, and two days later was prostrated and unable to turn in bed. A week later he had begun to improve and could move his arm and leg. He had no affection of bladder or rectum. He had acute pain in the back when taken ill. He was admitted to the Children's Hospital in October, 1898, and the child was then unable to walk or sit up in bed. He had no cranial nerve paralysis; but his voice was nasal in character from some weakness of the palate. He had general weakness in the legs. The knee-jerks were absent. There was no loss of sensation. The muscles on electrical examination showed reaction degeneration. No response to Faradism in arms or legs, and the A.C.C. was greater than K.C.C. He recovered to a considerable extent and went out of the hospital able to walk, but still very weak.

In 1913 he was seen again. He is now 20 years old. He is of very small stature—4 ft. 2 in. He has a marked scoliosis to the right. Both arms and legs are weak and thin, but the loss of power is general and not local, and does not look like a residual polio-myelitis. He has difficulty in rising from the ground, but can do so. He has difficulty in going upstairs.

The case, when seen in 1898, was regarded as one of peripheral neuritis and attributed to "influenza," which the boy was said to have had; but it is suggested that the virus of polio-myelitis may have been the cause of the toxic neuritis, from which he has never made a complete recovery.

I do not think it can at the present time be asserted that toxic poly-neuritis has been proved to be a manifestation of the virus of polio-myelitis, but if one accepts the experimental evidence that the virus does in some cases act as a direct poison to the neurone, and if one admits that the cases above quoted are definite cases of poly-neuritis with an acute onset, then I think there is reasonable ground for considering that poly-neuritis may sometimes be a manifestation of the virus of polio-myelitis. The question would be solved if we had a specific reaction for polio-myelitis, but such has not yet been determined, although numerous observers have worked at the subject. Considerable information might be afforded by a series of experiments on monkeys in which a known quantity of the virus was mixed with the serum of the affected patient and injected into a monkey, the experiment being controlled by an injection of a similar quantity of virus without any serum into another monkey. If the former failed to develop polio-myelitis whilst the latter did develop that disease, it would be justifiable to assume that the patient had at some time had polio-myelitis or was immune to that disease.

Polio-myelitis in London.

There is no doubt that polio-myelitis has been endemic in London for many years. To my knowledge it has occurred with the greatest regularity during the summer months for the last twenty years. It cannot be said to have been epidemic, although there has undoubtedly been a considerable variation in the incidence of the disease in different years. Charts prepared from cases collected during the years 1904, 1909, 1911, 1912, show how cases of that disease were distributed in London in those years. The cases forming the chart for 1904 were collected by myself, those of 1909 by Dr. Leonard Parsons, those of 1911 and 1912 are the officially notified cases of those years, the Local Government Board having, at the request of the London County Council, kindly allowed the disease to be made notifiable in September, 1911.

Polio-myelitis in England.

England has never suffered from a severe epidemic of polio-myelitis. It has always been a sporadic disease, scattered over the whole country. But there is little doubt that the incidence of the disease in 1911 was unusually severe. The year 1912 was remarkable for its wetness, and very few epidemics of polio-myelitis occurred, but some 691 cases were notified during the year. (These figures do not include the London cases.)

Conclusion.

Polio-myelitis and encephalitis must be regarded as an acute specific fever having an incubation period which is variable, but on the average is from eight to twelve days. The virus is carried in the mucous membrane of the mouth, nose and pharynx, not only of those who have had the disease, but also of those who have only been in contact with the infected. The disease may affect any part of the nervous system, but falls with greatest severity on the grey matter of the ventral horns of the spinal cord. The clinical symptoms to which it may give rise are variable and depend upon the incidence of the virus on the nervous system. Evidence of an experimental nature has been quoted showing that the virus of polio-myelitis may act not only by giving rise to infiltration of the tissues and vessel walls with cells of a lymphocytic nature, but also as a direct poison to the neurone. The former is known as the infiltrative type, the latter as the degenerative type of the disease. The form which the affection takes depends to a great extent on the virulence of the infection. The question whether an acute toxic neuritis may be a manifestation of acute polio-myelitis is discussed, and it is held that although at the present time the evidence for the acceptance of such is not complete, yet the experimental evidence would lead one to accept a slowly progressive neuritis as a manifestation of the virus of polio-myelitis.

REFERENCES.

(1) Anderson and Frost.—*Lancet*, 1912, ii. 1502.

(2) Batten.—"Case of Toxic Neuritis of Doubtful Nature," *Proc. Roy. Soc. Med.*, 1911, iv., Neurol. Sec. 21.

(3) Batten.—"Experimental Polio-myelitis." (Bibliography to 1912), *Lancet*, 1912. i. 413.

(4) Flexner.—"Some Problems in Infection and its Control," *Lancet*. 1912. i. 1271.

(5) Howard and Clark.—"Experiments on Insect Transmission of Virus of Poliomyelitis," *Journal of Experimental Med.*, 1912, xvi. 850.

(6) Kling, Pettersson, and Wernstedt.—*Investigations on Epidemic Infantile Paralysis.* Sweden, 1911.

(7) Marks.—*Journal of Experimental Med.*, 1911, xiv. 116.

(8) Peabody, Draper, and Dochez.—*A Clinical Study of Acute Polio-myelitis.* Monograph of the Rockefeller Institute, 1912.

CLINICAL RECORDS.

REFLEX STIMULATION OF THE VAGUS.

By W. J. MIDELTON, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.

In the Medical Press and Circular, December 11th, 1912, page 631, Dr. Brand published an article on reflex stimulation of the vagus. I decided to test the method, and have already published the results in some cases. For about two years I have attended a patient suffering from Graves's disease, but she did not improve until recently. On July 8th, 1913, amongst others she showed the following symptoms: General debility, palpitation, shortness of breath on exertion, pulse 104, blood pressure 180, wasting. I on that day applied the galvano-cautery in the neighbourhood of the 7th cervical vertebra over a small area. The patient did not attend as regularly as I wished, but aimed at coming once a week. By September 1st she felt much better, blood pressure 170.

September 16th, weight 7 st. 7 lbs., blood pressure 140; September 30th, weight 7 st. 9 lbs., blood pressure 140. Better in every way: in better spirits, greater capacity for exertion, much less palpitation, pulse 90. Although the stimulus was applied in a different situation from that recommended by Dr. Brand, the vagus is influenced nevertheless.

I feel very strongly that in counter-irritation we have a most valuable remedy, the possibilities of which are not sufficiently known, and it is too little practised.

While writing, I should like to say that I have read the following papers with very great interest.

Infectious Arthritis, Dr. Cooley, Medical Press and Circular, September 3rd, 1913, page 252.

The views expressed are, I am sure, destined to meet with wide acceptance and clear up much of the fog surrounding so-called rheumatoid arthritis.

Syphilitic Diseases of Joints and Bones in Childhood, Dr. Owen, September 17th, 1913, page 318. This paper goes admirably with the above and any general practitioner who will take the trouble to assimilate both thoroughly will be in a good position to give an accurate opinion.

A New Method of Treatment of Bacterial Infections, Prof. N. F. Surveyor, September 17th, 1913, page 323. This paper supplies much food for thought, but I will only comment on one portion. The author states: "In the paper mentioned above, I had stated that the staphylococcic vaccines, whether stock or autogenous, did not always give satisfactory results in cases of pyæmia, and it was suggested there that this might be due to the fact that there was infection with more than one microbe." In my opinion, this is a most important observation. Dudgeon showed years ago that peritonitis was often due to the pneumococcus and that if the staphyloccus albus was also present in the peritoneum the patient had a better chance of recovery than when it was not.

This seems to me to show that the staphylococcus albus is capable of destroying the penumococcus, and is a beneficent rather than malignant germ under certain conditions.

In the *British Journal of Children's Diseases*, July, 1913, Vol. X, pages 298-307, J. D. Rolleston gives an account of the treatment of diphtheria carriers with bouillon cultures of staphylococcus pyogenes aureus.

Summary.

"Ten chronic diphtheria bacillus carriers were treated by spraying and swabbing the throat or nose with a bouillon culture of (live) staphylococcus pyogenes aureus.

In six faucial cases the findings became negative within two to seven days after starting treatment. In two nasal cases the treatment was ineffective. In all but two cases a mild form of sore throat was produced, but no complication ensued." The subject, the antagonism of germs, has fascinated me for many years, and I am glad to see that good work is being done by those in a better position for observation.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Epithelioma of the Tongue.—Mr. Willmott Evans operated on a man, æt. 53, who had been admitted suffering from an ulcer of the side of the tongue. The history of the case was that the ulcer had been present for about three months; the patient attributed it to the rubbing of a sharp tooth. On examination, on the left edge of the tongue, between the apex and the base, an irregular ulcer was seen with hardened edges, which were raised and everted. The hardness did not extend to the floor of the mouth. When the man made an attempt to put out the tongue, the organ could only be protruded for half an inch beyond the teeth, the tip being deviated to the left side. No enlarged glands were palpable under the jaw. A diagnosis was made of squamous carcinoma, and it was decided to remove the tongue through the mouth.

After the patient had been anæsthetised, a gag was inserted in the opposite side of the mouth, which was by this means fully opened. By means of a handled needle a stout ligature was passed through the apex of the tongue on the left side, the organ being forcibly drawn forwards. With scissors the tongue was slit down the middle as far as the circumvallate papillæ; then the mucous membrane of the floor of the mouth was divided on the left side; and lastly a transverse cut was made with scissors one inch behind the ulcer. Scissors were used to slowly snip through the tongue, and the lingual artery was caught with forceps as soon as it was cut through. No other vessel required ligature. The apex of the tongue was then carried back and fastened to the hindermost portion of the cut surface, and the mucous membrane sutured above and below the tongue, so that no raw surface was left. The surface of the tongue was then painted over with Whitehead's varnish.

Mr. Evans said that it was only in certain cases of epithelioma of the tongue in which the disease was strictly limited that a unilateral removal is possible or desirable. He pointed out that by the method he had employed of covering up all raw surfaces healing is greatly hastened and risk of septic pneumonia done away with. In a fortnight, he remarked, when the incisions into the tongue were completely healed, he would proceed to the removal of the submaxillary lymphatic glands, as he thought that performing the operation in two stages was preferable.

BIRKENHEAD CHILDREN'S INFIRMARY.

Cavernous Sinus Thrombosis of Nasal Origin—Operation—Death From Acute Meningitis.—Mr. **Adair-Dighton** operated on a child, æt. 6, which had been admitted to hospital in the afternoon with marked exophthalmos. There was a previous history of an accident some four weeks before, but no sign had been noticed until the night before admission, when the right eye commenced to bulge. Shortly after admission the patient had a rigor, the temperature reaching 103°, pulse 160, respiration 28. On examination there was marked exophthalmos in the right, and a dusky haze round the left eye; œdema was evident, there was optic neuritis in both eyes, and the child was comatose. Mr. Adair-Dighton said he considered it a typical case of cavernous sinus thrombosis, probably due to the accident having caused fracture of the anterior fossa, and infection having extended through this to the sinus. The prognosis was very bad, but as he had recently had a case of cavernous sinusitis of otitic origin recover, he did not consider it as hopeless as it was generally considered.

Under chloroform anæsthesia, he commenced by completely exenterating the right orbit, encountering foul-smelling pus in the region of the orbital plate of the ethmoid. After thoroughly clearing away all diseased tissue, he removed the superior wall of the orbital cavity from within one inch of the orbital margin in front to the sphenoidal fissure behind—*i.e.*, the orbital plate of the frontal bone and the greater part of the lesser wing of the sphenoid bone. He then lifted the right frontal lobe and curetted the cavernous sinus, concluding the operation by inserting a rubber drainage tube. The orbital cavity was dusted with orthoform powder, and a wet dressing applied. On the following day the temperature had dropped to normal, and hopes were entertained of the patient's recovery until the fourth day, when the temperature rose to 104°. Lumbar puncture was performed, and the spinal fluid was found deficient in carbohydrates. The child died from meningitis on the sixth day. At the *post-mortem* examination, the right cavernous sinus was found to be full of a septic thrombus, which extended for some distance along the superior petrosal sinus. The left cavernous sinus showed signs of early disease. The right frontal sinus was markedly diseased, and this had evidently extended to the ethmoidal cells, as these were extensively diseased, and communicated with the orbit by a fistula.

Mr. Adair-Dighton considered the case to be of particular interest, as it showed how one might be led astray by a previous history. In this case, one was led to expect fracture of the base, and the nasal condition was overlooked. It also conclusively proved that disease of the frontal sinus could occur at a much earlier age than was described, previous to Onodi's classical work, and further, it showed the path of extension from the nasal cavities to the orbit, and thence to the meninges which, in this case, was probably by direct contact plus the anterior, posterior ethmoidal, and ophthalmic veins.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Meeting held October 9th, 1913.

The President, Dr. W. S. A. Griffith, in the Chair.

The Winter Session was opened by the **President**, who gave the introductory address.

Dr. **Macnaughton Jones** (London) read a short communication on

A CASE OF COMPLETE ABSENCE OF THE INTERNAL GENITALIA.

Dr. Macnaughton-Jones, in introducing his remarks on a case in which no internal genitalia could be detected, said that among other instances he had previously recorded was a case of complete absence of introitus in a child (a small orifice leading to the urethra); a rudimentary vagina and uterus were present, but no adnexa could be detected. He had also had a case in which the external genitalia were normal, the uterus rudimentary, and the adnexa present; and another case similar to the present one. The age of the patient was 27. Her health was good, and an examination was required as the question of marriage arose. As in the other cases, bi-manual, vaginal, recto-vaginal, and recto-vesical examinations were made. The external genitalia and vagina were normal; the uterus was represented by a nodule a little larger than a pea, and no vestige of adnexa could be felt. He dwelt on the importance in cases of primary amenorrhœa when menstruation was delayed of not putting off an examination. He had known cases (in one of which the patient had gone to Spa for treatment) where various remedies were used to induce catamenia when the genitalia were absent.

The paper was discussed by Dr. **Blacker** and Mr. **Douglas Drew**, the latter referring to a case where apparently, by pelvic and vaginal examination, no uterus, ovaries or tubes were present, yet at operation ovaries were found high up in the flanks together with a horse-shoe kidney in the pelvis.

Dr. **Macnaughton-Jones** also showed a specimen of pyosalpinx of an accessory tube from the adnexa of a patient, æt. 38, unmarried. The Fallopian tube at the right side was converted into an egg-shaped tumour, which contained a quantity of cretaceous matter, the result of an old pyosalpinx. At the left side the adnexa were healthy, but an exactly similar tumour existed at the outer edge of the broad ligament with histological features similar to that of the right side. The specimen was examined by Mr. Handley, and it was of interest as an instance of a cyst of an accessory Fallopian origin being converted into a pyosalpinx. At either side the cyst was incorporated with the round ligament.

He demonstrated by lantern the histological features present in accessory hydro-salpinx as originally described by Mr. Handley, and also some instances of accessory cysts he had himself met with.

Remarks were made by Mr. **Alban Doran** and the **President**.

REPORT OF TWENTY-THREE CASES OF ADNEXAL TUBERCULOSIS.

Miss **Ivens** (Liverpool) read a paper on adnexal tuberculosis based on the experience of twenty-three tabulated cases, of which all but one were apparently primary. An early diagnosis followed by operative treatment gave good results. The disease became much more serious when bowel complications had occurred. The history of an attack of obscure peritonitis in girlhood, followed by primary amenorrhœa, was given in four chronic cases, and partial or complete amenorrhœa was very common. Pelvic pain bearing no special relationship to menstruation was generally present, associated with leucorrhœa. Sterility was an almost constant feature, two patients only have borne each one child, many years previously. The majority were in the early twenties; fourteen were married. In every case a varying degree of thickening of the tubes could be felt. Only two were unilateral. Laparotomy was performed in twenty-two instances for the removal of the diseased tubes, the uterus being removed only for special indications. Conservative treatment of the ovaries was possible in all but six cases. In one resection of the tube for the removal of a tuberculous nodule was performed. Drainage was avoided except in the presence of a secondary infection, and primary union usually occurred. Two cases died, one of post-operative hæmatemesis, and one of septic nephritis. Sixteen were traced and did well. Three made a good immediate recovery, but were then lost sight of. One required a second operation for the removal of the remaining tube. The one case in which the disease was secondary died a year after operation.

Two cases came under observation with acute abdominal symptoms due to the rapid enlargement of pre-existing chronic cysts, where the disease had apparently undergone a spontaneous cure. Miss Ivens therefore advocated the operative treatment of all cases of adnexal tuberculosis, except in the presence of a second active focus, and considered that the removal of tuberculous products not only had a very beneficial effect on the general health, but at the same time obviated the risks of later dissemination or local complications.

The paper was accompanied by a detailed analysis of the cases, together with microphotographs, the latter being demonstrated on the epidiascope.

Dr. BRIGGS (Liverpool), who alluded to the chronic character of Miss Ivens' cases, said that in more acute cases, which had some clinical resemblance to typhoid fever, operation seemed imperative. In the majority of cases there are tubercular foci elsewhere, and their aggravation or relief by operation cannot be locally governed.

Mr. DOUGLAS DREW said that he had considerable experience in the question of operation for tuberculous peritonitis in children, but had not met with a case in which there was disease of the tubes. Possibly in Miss Ivens' cases tuberculous peritonitis was an antecedent factor. Mr. Drew asked in what percentage of cases a tuberculous endometritis was present. Possibly it was of frequent occurrence, but appeared to recover spontaneously after the main lesion was removed.

Dr. MACNAUGHTON-JONES remarked that a few years back he had read a paper before the Section on "Primary Tuberculosis of the Fallopian Tube," and had shown three specimens, and he referred to another paper which appeared in the *Edinburgh Medical Journal*, in which statistics were collected of many thousand cases of genital tuberculosis. In these eight to nine per cent. were primary. In young persons, seeing the difficulty of diagnosis, every test for the presence of tubercle should be made. In Miss Ivens' cases the greater number were under 30, but 40 per cent. remained well some considerable time after operation.

In reply, Miss IVENS stated that her cases included types of both active and chronic disease. Tuberculous endometritis had been found once, but systematic curettage had not been practised, as leucorrhœa tended to disappear after removal of the diseased tubes. It was possible that in cases where tuberculous peritonitis had occurred in childhood the infection remained latent to become active with the onset of puberty. Miss Ivens thanked the speakers for their remarks, and was grateful for the criticism of that eminent authority on pelvic tuberculosis, Dr. Macnaughton-Jones.

Dr. R. L. MACKENZIE WALLIS and Dr. HERBERT WILLIAMSON read a paper on

THE SERUM DIAGNOSIS OF PREGNANCY, WITH A DEMONSTRATION OF APPARATUS AND METHODS.

The paper was read in two parts, Dr. Mackenzie Wallis taking the experimental chemical department, and Dr. Williamson the clinical aspects.

In Part 1, Dr. Wallis dealt with the two methods devised by Abderhalden for the diagnosis of pregnancy—namely, the optical test and the dialysation method. The principle upon which these two tests is based is the reaction of the blood to foreign substances introduced from without. Any foreign body when injected into the circulation excites the production of a protective or guardian ferment, which rapidly destroys the substance. The proteins contained in placental tissue thus produce a specific ferment, and this can be detected in the blood serum of pregnant women by both methods from the seventh week and up to fifteen days after labour. The tests depend, therefore, upon the presence of chorionic villi in the body, which are capable of being washed into the circulation and producing the special ferment necessary for their disintegration. That such a ferment is mobilised in the blood has been conclusively shown by experiments on animals. For the optical test a good polarimeter was required, and also a preparation of placental peptone, the details of the isolation of this material being given. The splitting of this placental peptone into amino-acids by the ferment in the blood serum could then be followed by the optical changes that ensue. The *technique* employed by the writer in the dialysation test was given in detail, including the preparation of the placental tissue, the testing of the dialysing tubes, and the collection of the serum. The necessity of absolute asepsis throughout was especially emphasised. The application of the ninhydrin reaction for the detection of dialysable substances was described, and attention drawn to the sources of possible errors. Judging from the results obtained with over 100 cases, the writer had no hesitation in stating that the test was of value in the diagnosis particularly of the following conditions: (1) The diagnosis of early pregnancy, (2) the differentiation of fibroids from pregnancy, (3) the diagnosis of chorion epithelioma, (4) the presence of a retained placenta, (5) the diagnosis of an ectopic pregnancy, where the latter has not been followed by tubal abortion and hæmatocele.

In Part II. of the paper, Dr. HERBERT WILLIAMSON (London) pointed out the importance of Abderhalden's work, remarking that if it be true that the blood of a pregnant or recently delivered woman contains a ferment specific to placental albumin, if this ferment be constantly present and can be easily demonstrated, if the sources of error are few and can be readily avoided, the test possesses great value in both clinical and forensic medicine. He reported a series of 50 controls made by Dr. Mackenzie Wallis. Of these, 20 women were either in the last three months of pregnancy or had been recently delivered. In every case the result was positive. Thirty women were not pregnant, and in all these patients the reaction was negative. He then proceeded to give clinical details of 16 cases in which the test had been applied for diagnostic purposes. The patients had all been kept under observation and the results were:—Correct deduction drawn from the test, 12; incorrect, 2; result still in doubt, 2.

The cases were as follows:—Suspected ectopic gestation, 3; pelvic and abdominal tumours where it was suspected that the whole or part of the tumour might be the pregnant uterus, 5; suspected chorion-epithelioma, 2; chorea in a woman of 21, 1; heart disease with amenorrhœa, 1; nephritis with exacerbation of symptoms and amenorrhœa, 2; late puerperal sepsis, 2; total, 16.

The two patients who gave a positive reaction in the absence of pregnancy both suffered from pyosalpinx, and this suggested the advisability of ascertaining whether a similar result was common in suppurating cases. The controls made did not support this view.

The author insisted upon the importance of subjecting at regular intervals to Abderhalden's test all patients who have borne a hydatidiform mole, for should a chorion-epithelioma develop the test remains positive instead of becoming negative in a few days as after a normal pregnancy. This fact was well illustrated by the case (which he quoted in detail) of a woman who developed the symptoms of chorion-epithelioma fifteen months after the expulsion of a mole.

From his experience he drew the following deductions:—(1) It is established that the serum of pregnant women contains a ferment specific to placental albumin; (2) that this ferment can be demonstrated from the eighth week of pregnancy until ten days after delivery; (3) that it may be demonstrated both by the polarimeter and by the methods of dialysis; (4) that the former method is more reliable, in that the sources of error are fewer; (5) that the accuracy of the test depends upon the most scrupulous care in detail, and it is only in the hands of an expert that the results can be relied upon; (6) that the ferment is found only when chorionic tissue is present in the body; (7) it is probable that under certain conditions not fully understood at present, the colour-reactions and optical effects produced by the ferment may be simulated; (8) that the common sources of error have already been detected, and that in the near future the test may be expected to give reliable results.

The two papers were discussed by the PRESIDENT, Dr. ARCHIBALD GARROD, Dr. BLACKER, Dr. EMBLEDON, Dr. LEITCH, Dr. DONALDSON and Dr. BOURNE.

Dr. WALLIS and Dr. WILLIAMSON replied.

NEW DERMATOLOGICAL SOCIETY OF LONDON.

OPENING MEETING OF THE SESSION, HELD THURSDAY, OCTOBER 9TH, 1913, AT THE WESTERN SKIN HOSPITAL, HAMPSTEAD ROAD, LONDON.

The President, DR. DAVID WALSH, in the Chair.

THE Hon. Secretary (Dr. NORMAN MEACHEN) read the minutes of the last meeting, which were duly confirmed and signed.

Dr. C. G. Mack was elected hon. secretary in place of Dr. Meachen, whose term of office had expired.

Dr. A. EDDOWES proposed hearty thanks to Dr. Meachen for the work he had done for the Society as Secretary; he knew how arduous such duties were, from his own experience. This was seconded by Dr. VINRACE.

DEMONSTRATION OF CASES AND DISCUSSION ON LICHEN PLANUS.

Dr. MEACHEN showed two cases. The first, a woman, æt. 38, single, with an eruption over the whole body. It was of six years' duration, and had never quite disappeared. The irritation was intense, and when he saw her at the Prince of Wales's Hospital there were many features resembling exfoliative dermatitis. Close inspection, however, revealed lichenoid elements, and there were confluent patches on neck and limbs. There were no mucous membrane lesions. It was said to have commenced under the garter on one leg, and that focus was still present. To his knowledge she had had no arsenical treatment before he saw her. There was a history of much mental worry and trouble before the eruption occurred. It was now retrogressing under treatment. At first it looked like seborrhœa corporis. In the second case the eruption appeared at first as a bulla, and such a lesion could now be seen on the ankle, but the following week there were lichenoid lesions on the dorsum of the foot, the inner side of the knee, and the flexor surfaces of the arms. She now showed the typical distribution. Her age was 49, married, and the duration was two months.

The PRESIDENT showed a woman, æt. 65, who had had the condition six months. Typical patches were evident on the legs and the inner side of the thighs. There was much irritation. When a child, she had scarlet fever and what was spoken of as "brain fever"—doubtless meningitis. For 25 years she had had some cough and bronchitis.

Dr. EDDOWES showed a woman with a follicular inflammation which frequently led on to lichenisation, but was not a case of lichen planus. Hairs came out of little red points. She had not been under his treatment long, but already the character of the eruption had altered. Little papules outside the main patch looked much like lichen planus, but a lens soon showed that hairs came out of the centre of these follicular lesions. This condition he believed to be rather common. This patient had been ill two years, and just before then was said to have had rheumatic fever and blood poisoning, and had had neuritis. For two years she slept badly, and had distressing dreams. This was a case of specific trouble, and she was getting better under mercurial treatment, chiefly local. The tendency for such cases to show lichenisation made them instructive when compared with actual lichen planus. He had notes of a similar case which he saw in 1902, with a microscopic section, and he believed a section of the present case would present a similar picture.

Dr. H. C. SAMUEL showed the case of a woman who came to hospital with a widespread eruption all over the trunk, arms and legs. She had had much worry. A patch was found on the thigh which she had had four or five years. Four years afterwards it lighted up, and she had an acute outbreak, and that was why he was exhibiting the case. She was now improving.

His next case, also a woman, he showed as dermatitis bearing a resemblance to lichen planus. It was really a peri-follicular condition, and it gave no impression of infiltration. There were no definite papules, and no lesions in the mouth. The patient was a seborrhœic subject. She had been treated as a case of dermatitis.

Dr. D. VINRACE showed a girl æt. 7 who had had lichen urticatus from the seventh week of life, to illustrate the lichenoid appearance of the lesions frequently seen in this disease.

The PRESIDENT then introduced the discussion on lichen planus, which will be found fully reported elsewhere in the present issue. See page 443.

Dr. ALFRED EDDOWES remarked that he at first thought it would have been good to have a discussion on lichen, but he now thought that would have been too wide a subject for one debate. The flat papule was greatly due to the position on the surface of the skin where the hair follicles were well marked. This tended to obscure the fact that the lichen planus began above the sweat pore and duct. The affection, indeed, seemed to be connected with the sweat apparatus. One seldom saw distinct lichen planus on the face. They were nearly always plugs, which the patient scratched out; and they were sometimes called grubs, or sand. Where the follicles were well developed, one saw the accuminate or obtuse form of lesion. The flat papules were best seen where the sweat areas had little or no hair.

With regard to the pathology, he had examined many sections over a number of years, and the hypertrophy of the horny layer was very distinct. In the granular layer the number and size of the cells was increased. The cell-infiltration occurred particularly in the papillary layer, and the sweat ducts showed the same. The sweat pores were often found to be filled with a horny plug. It was necessary to study the grooving of the skin, as that was where the hairs particularly grew. Distension and degeneration of the sweat gland could often be seen, showing the profound disturbance of the sweat apparatus. Sections taken should lie, as far as possible, in the plane of the ducts and pores; otherwise a papule might be shown in a section without its corresponding sweat gland. If sections were too thin, they contained only portions of the spiral duct. The hair follicles might also exhibit cell-infiltration, and this had often attracted too much attention, as it occurred only secondarily. He had brought a number of sections of lichen planus and other lesions somewhat allied, some of which he had diagnosed as pityriasis rubra pilaris.

Lichen planus came out after scabies. Why? Probably the patient was ready for some traumatism to develop the skin condition. The attack might have come on for some other reason. If there were 50 per cent. shock and 50 per cent. traumatism, the rash might come out. There was a personal peculiarity in the skin which might lead to eczema in one case, and lichen planus in another.

DR. SAMUEL said he was under the impression that most of the material in the sweat ducts was hyaline, except in cases of lichen verrucosus. With regard to umbilication in the papules, there were two points of view. Some thought the umbilication was due to a sweat pore, while others said it was due to contraction of the hyaline material. He was in favour of the sweat duct view, because the papules were marked by the natural grooves of the skin, and the patches corresponded with the sweat ducts. The opening was due to the sweat pore.

With regard to treatment, some preferred to inject orsudan and soamin. Nervous shock as an ætiological factor had not impressed him very much; it was easy to get such a history from most people if one asked for it. The amount of itching in the disease was very variable, but it was sometimes given as a point in diagnosis. He believed it depended largely on the nervous stability of the patient. Many patients with lichen planus did not complain of itching at all. He was uncertain whether X-rays brought about improvement by relieving the itching and permitting spontaneous involution, or by influencing for good the disease itself. When bullæ formed, were they due to the arsenic, or not? In some cases in which arsenic had not been given bullæ appeared. The same remark applied to pigmentation, which likewise had been said to be due to arsenic. Pigmentation depended on the intensity of the lesion and the degree of itching.

He suggested that there might be a causal organism of some sort in lichen planus, for its behaviour resembled that of syphilis in many ways. Lumbar puncture had been employed by Pernet to relieve pruritus; it certainly relieved the itching for days, and the disease tended to get better because there was no more scratching.

Dr. Meachen said this question was brought before the Dermatological Society of London 13 years ago, and the late Dr. Radcliffe Crocker chose it as the subject of his address. It was somewhat of a reproach to dermatology that our knowledge of its pathology had not advanced in the meantime. The subject was so vast that one could not expect to discuss every point concerning it. His remarks would be limited to two features. There were anomalous forms of the disease, which rendered diagnosis difficult; it was easy enough to recognise a case when the characteristic lesions were in the classical situations. Sometimes the lesions were annular, often slightly papular. He showed the photograph of a woman, æt. 51, who had had the annular form of lichen planus eight years. It looked like an old syphilide. That case responded very well to arsenic—it was seen in the pre-Wassermann days. One saw the so-called lichen streaks following upon scratching; and Sherrington and Baker had suggested the neurotrophic origin of the disease from that feature. Lichenification occurring in scratch marks was common. Cases of scabies sometimes passed into lichen planus. It only partially yielded to sulphur, and then one saw the typical lichen planus lesions appear. Another anomalous form was that in which bullæ appeared, and the vexed question arose as to whether the bullæ were consequent upon the arsenic or independent of it. Dr. Crocker said the answer must be given in the affirmative, and the position seemed to be the same still. Sometimes bullæ preceded the appearance of papules. In the elderly married woman shown by him that day the first evidence was a large bulla on the external malleolus, and she had a few smaller bullæ on the palms. After these, came the characteristic lichenoid papules on the flexor surfaces. About a year ago he showed a case of lichen planus before this Society where there had been much irritation, and in which every lesion upon the legs became vesicular. He believed that patient had morbus cordis. Kaposi had an instance in which bullæ appeared without any arsenical treatment at all. Two facts, therefore stand out prominently. First, there was a local irritation—as shown by several cases at that meeting—and then there was mental and nervous strain. It was quite common after a severe nervous shock. Dr. Whitfield had reported the case of a cyclist who rode all night in the pouring rain. He got not only a chill but a nervous shock, and next day he had a profuse eruption of lichen planus. Others would recall lichen planus having occurred after the loss of a near relative of the patient. Bichloride of mercury was a favourite drug for the disease in America. If his cases did not improve on arsenic, he put them on liquor. hydrarg. perchlor. He did not see why salvarsan should not do good in lichen planus.

Dr. Vinrace said one heard that lichen planus was a condition which arose when the skin had been prepared by other ailments; but there was no condition he knew of like syphilis for upsetting the cutaneous surface of the body. On the theory just mentioned, however, one would expect lichen planus to be a frequent sequel of syphilis; yet he had not seen more than one or two cases in which that was so. He had one old case of syphilis which developed lichen planus in the scapular region.

Dr. C. G. Mack pointed out that none of the speakers had discussed the question of predisposition, and mentioned that, years ago, he discussed with Mr. Bruce Clarke the question of predisposition to cancer; why one man could smoke a clay pipe for forty years and never develop cancer of the lip, whereas another developed it after only fifteen years' similar indulgence. One line of research in the future would be to ascertain each person's predisposition and liability.

Dr. J. D. P. McLatchie pointed out that one girl with lichen planus used to get much relief from the irritation by bathing the lesions with her own urine.

The President, in replying to the discussion, said one repeatedly heard a history of shock in cases of lichen planus, and examination of subjects of the disease showed them to have signs of nervousness. He never used arsenic in treatment, but invariably employed perchloride of mercury, beginning with ½ drachm or 1 drachm. He had had opportunities of comparing his results with those of his colleagues who used arsenic, and the comparison was favourable to his remedy. The practical point was the ability to allay the irritation, for that permitted sleep and the recovery of the nervous system. One of the best antipruriginous lotions was carbolic acid and tincture of camphor.

CENTRAL MIDWIVES BOARD.

Meeting held October 9th, 1913.

Sir Francis Champneys in the Chair.

THE INSURANCE ACT AND THE MIDWIVES ACT.

The correspondence included a letter from the Clerk of the Council transmitting a copy of a letter from the National Health Insurance Commissioners on the effect of the working of the Insurance Act on the administration of the Midwives Act.

Letters were read from the Deputy Coroner for the West Riding of Yorkshire calling the attention of the Board to the fact that premature birth is not one of the cases specifically mentioned in the Rules as imposing on a midwife the obligation of advising medical assistance, and asking the views of the Board on the subject; and from the Clerk of the Derbyshire County Council suggesting that a rule should be framed under which midwives would automatically cease to be enrolled on attaining the age of seventy.

In reply to both these communications, it was agreed that the suggestions contained in them should be brought up at the next revision of the Rules.

The Staffordshire Training Home for Nurses was approved as a place where training might be done, but the doctor and midwife must be individually approved.

William Ardendt Hagestadt Watte, M.B., and Thomas Thomson Rankin, M.D., were approved as teachers. With reference to one of the applications which were refused, Mr. Parker Young entered a protest. Recognition for this purpose does not depend merely on the suitability for a teacher of the applicant, but on whether the Board, which is not anxious to multiply training centres, considers the district in need of another teacher. Mr. Parker Young was only supported Sir Shirley Murphy, so lost his amendment.

The Secretary's report on the last examination showed a total of 315 candidates, with a percentage of failures amounting to 17.4.

Miss Paget inquired whether any steps had been taken to ascertain if a woman described in the Press reports of the proceedings as connected with a recent prosecution for an offence under the Criminal Law Amendment Act in Piccadilly was a certified midwife as had been asserted, and, if so, whether it was contemplated to cite her to appear before the Board. The Secretary had ascertained that the woman was on the Roll, and the matter was referred to the Penal Cases Committee.

Penal Boards will be held on November 6th, 11th and 12th.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Oct. 18th, 1913.

At the Verein der Aerzte, Wiesbaden, Hr. Baer read a paper on the

Extension of Operations within the Bladder.

At present such operations were limited to operations for stone, foreign bodies and tumours. In classes 1 and 3 he demonstrated operations that had hitherto been considered unsuitable for intravesical operation. One was a hairpin that was encrusted with a calculus the size of a walnut, removed from the bladder of a girl seven years of age. The operation would have been performed by the sectio alta method, but the father of the child refused to have the operation performed. Thanks to Roentgenography, the calculus was accurately localised, and the extraction done by lithotripsy performed through an endoscopic tube. The figures shown were (1) the hairpin with the stone lying transversely and filling the small pelvis; (2) the pin freed from the stone, (3) the pin and stone after removal.

The second case was that of a tumour. The high-frequency current was at first tried, and in the opinion of the speaker was well worthy of further development, but it could in no way be a substitute for the écraseur. When made use of through the speaker's pancystoscope it could be applied from any direction and without injury to the walls of the bladder. The universal freedom of movement of his apparatus enabled him to operate in the following case, one of vesico-vaginal fistula. The patient was 26 years of age. She had had several difficult labours, and after the last one a vesico-vaginal fistula resulted. She remained under gynæcological treatment for a long period, and when she would submit to this no longer she passed into the hands of a specialist in bladder diseases (Dr. Bastos, of Lisbon). All methods of treatment short of operation were tried in vain. The speaker, called to Lisbon by Dr. Bastos, there constructed a small apex cautery specially for the case, and made out of his movable loop carrier, with which the fistula was cauterised through his pancystoscope. The good freshening up of the wound in that way promised, as he thought, a good prospect as regarded healing. The operation lasted about 15 minutes. A retention catheter was left in the bladder. From the end of the second week the fistula remained permanently closed. The operation had now been performed over a year ago. In the opinion of the speaker the operation was only suitable for the treatment of small fistulæ.

A discussion followed the reading of the paper, in which Hr. Stein said that the treatment of tumours of the bladder by the high-frequency current that had been touched on by the reader of the paper afforded a particularly good prognosis. For the destruction of malignant tumours of the bladder wall diathermia was eminently suited, as it acted more rapidly, more intensively, and with greater certainty than the cautery. For the removal of papillomata it did not come into consideration so much. He pointed out the fundamental distinction between diathermia and fulguration, the latter having been introduced in error.

Hr. Baer thanked his colleague for his friendly criticism and for the suggestion to make use of the high-frequency current, which he thought promised so much for the treatment of tumours of the bladder. He had not rejected that form of treatment; on the contrary, he had recognised its value when he said, "The high-frequency current is a valuable complement of treatment, but it is not a substitute for the cautery-écraseur." Both methods were to be used together, or in common. The high frequency would be applicable in his opinion in (1) small multiple new growths, (2) later treatment of unfavourably situated pedicles, (3) many malignant growths unsuitable for bloody operations, (4) many malignant tumours where bloody operations were declined.

AUSTRIA.

Vienna, Oct. 18th, 1913.

The Therapeutic Value of Phosphorus in Rickets.

The final results and conclusions of the late Prof. Max Kassowitz on the subject of rachitis have just been published. He had made the subject a special study for fully thirty years, and his latest facts and reasonings show little deviation from those set forth in his earliest publications on the subject. He had arranged his ultimate data and the opinions based thereon under the following general rules of clinical observation and practice:—(1) Numerous observers on whose reasoning powers and reliability of statement no doubts can be thrown have demonstrated in the most conclusive manner that in the treatment of the osteal alterations and nervous lesions of rachitic patients they have obtained the same therapeutic results from the medicinal administration of preparations of phosphorus without cod-liver oil, as with the combination of both those agents. (2) The same conclusions were arrived at from the general reasoning processes adopted in 1884, and the latest clinical data obtained from his experimental researches on the same subject. (3) It is utterly impossible to draw any conclusions regarding the processes which are taking place in the osseous system from the continually fluctuating results of calculations of the calcium equilibrium, which are mainly based on examination of the intestinal contents. (4) The view that the phosphorus stratum, which was experimentally produced by this author, is formed merely from the calcified cartilage, is an utterly groundless one. (5) There is no scientific proof that the alterations in structure of the opposed surfaces of adjacent bones, which are produced in mammals and fowls by the administration of small doses of phosphorus, cannot be also produced in healthy children by corresponding methods.

Relationship of Duodenal Secretions to Catarrhal Jaundice and Gastric Lesions.

Dr. J. Matko has found, in his researches on the contents of the duodenum in cases of catarrhal jaundice, that in some cases there is an increase of the secretion, chiefly from the duodenal mucous surface. Researches were simultaneously carried out on parallel lines regarding the presence of trypsin in the "oil breakfast" and in the alvine evacuations; on the appearance of the aldehyde reaction in the latter and in the urine; and on the occurrence of alimentary dextrosuria and galactosuria. These investigations displayed results which led to important conclusions regarding the liver and pancreas in their functional relationship to the simultaneous processes that happen to be taking place in the duodenum, and more especially around the papilla of Vater. It was found that alimentary dextrosuria could be present simultaneously with either an increased or diminished secretion of trypsin. In three cases of undoubted duodenal ulcer there was found in each, on administration of Volhard's breakfast, a copious quantity of intestinal juice—mingled with which was a notable quantity of biliary secretion, the collective secretion also displaying an extreme tryptic activity. This wealth of digestive juices was attribued by Dr. Matko to hypersecretion of the duodenal glands, with coincident hyperactivity of the pancreatic acini leading to the formation of great quantities of trypsin. This influence on the experimental results of the fat breakfast is not found in cases of peri-duodenal affections, of gastric or of pyloric ulcer.

The Influence of Pituglandol on the Progress of Labour.

Dr. Hugo Bosse has published the results of his researches regarding the clinical value of pituglandol (Roche) during labour. They have demonstrated the fact that this is a trustworthy and wholly innoxious anodyne agent in the stage of dilatation of the os uteri; and, even more especially, during the period of the expulsion of the fœtus. In combination with pantopon, or with pantopon-scopolamin, it secures a painless and rapidly progressive labour. When operative procedure is found necessary to the completion of the labour, it should always be previously injected as a prophylactic agent, inasmuch as it acts as a preventive of post-partum atony of the uterus.

Application of Serology to Psychiatry.

Dr. Fauser has published a remarkable communication on the use of serological procedure, and more especially of the Aberhalden method, in psychiatry, and records his observations of a number of cases in which this method furnished a fully reliable differential diagnosis of dementia præcox. In dementia præcox there is usually defective function of the germinal glands and of the brain.

HUNGARY.

Budapest, Oct. 18th, 1913.

On Lumbago.

Dr. Tauszk says that persons with a tendency to lumbago should refrain from cold baths and fatiguing exercises. He has encountered cases in which the lumbago developed in connection with a series of gymnasium exercises. The chief characteristic of lumbago, he said, is the tendency to recurrence. In some cases the trouble is unsuspected fracture of the transverse process of some vertebræ. In other cases he has been able to discover a tender point in the psoas iliacus muscle on one side, palpating down from the attachment of the muscle on the trochanter. When this is the case attempts to flex the thigh against resistance are painful. The old lumbago is thus revealed as having its seat not in the back, but in the front. The discovery threw retrospective light on a number of puzzling cases in his practice. As with sciatica, the spine frequently shows curvature from the affected side. the affected muscle being relaxed as with rheumatic torticollis. In some cases of lumbago there is accompanying neuralgia in the pelvis, especially in the sciatic nerve, and this should be regarded in treatment. He advises examination during a free interval, seeking for the almost inevitable tender point, and until treatment succeeds in restoring normal sensibility here there is little prospect of a permanent cure. Rest and warmth are the main factors, and he has the patient apply a hot water bottle to the seat of the sensitive point on retiring, taking internally at the same time 0.5 or 1 gm. hydropyrin. In very severe cases the patient should stay in bed. An orthopædic corset may be found useful (as advised by Hansen, of Christiania), and this or a plaster cast is absolutely necessary in traumatic lumbago; it may save the patient much trouble and discomfort later. Massage of the tender points is a further aid in treatment, but it should be done by skilled hands on a systematic plan, and repeated at intervals during two or three months. It should be commenced very gently, as, done carelessly, it may do more harm than good. The massage is most effectual with the patient reclining, or partially reclining, with flexed knees.

Injection of Paraffin for Incontinence of Urine.

At the Medical Society, Dr. Illyes reviewed the history of injection of paraffin around the urethra in cases of laceration or other lesion of the sphincter, inducing insufficiency, first introduced, he said, by Gersuny in 1900. Illyes has applied the method himself in one case, and compares the outcome with that in twelve other cases on record. Continence was constantly secured by the procedure, which in several of the cases was the last resort after failure of all other measures. The final outcome is known only in two of the cases—in one of Gersuny's after an interval of three years, and in Illyes's case, after nearly two years. In the latter patient, a woman, æt. 34, the paraffin was found apparently unmodified at the points injected, answering its purpose just as well after nearly two years as it did at first. He injected a total of 9 or 10 gm. of paraffin with a melting point of 77° C., at five sittings. The fluid paraffin was taken up into the syringe, and was allowed to cool to the consistency of a thin salve to avoid the danger of embolism. The incontinence in his case was due to laceration of the urethra during childbirth. The urine still dribbled nothwithstanding several operations during the five years afterward striving to restore normal conditions in the urethra.

Nerve Anastomosis for Facial Paralysis.

Dr. Doronyi reports a case of old and severe facial paralysis in a robust man of 28. He sutured the peripheral stump of the facial nerve to the central stump of the spinal accessory nerve, and then sutured the central stump of the facial to the spinofacial junction thus made. The results were extremely satisfactory, he said. He tabulated or summarised more fully the details of eighty-five cases of nerve-grafting operations on the facial which he has found on record, grouping them according as the anastomosis was made with the accessory or the hypoglossal nerve. This list included five operations of the kind done in Hungary during the last five years.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH.

Chair of Clinical Medicine, Edinburgh.

At a meeting of the Joint Committee of the Infirmary and University Court, held last week, Dr. William Russell and Dr. Graham Brown were selected from a list of applicants, and their names will be submitted to the Court, which is meeting on the 20th inst., to make the appointment.

Edinburgh School of Medicine for Women.

A new anatomy department was inaugurated in connection with this school on October 17th. The Dean of the School, Dr. William Russell, before calling on Sir William Turner, said that this was the sixth year that the School had been housed in the College of Surgeons. When Minto House was sold, some had thought that the School would come to an end, but the lecturers had stepped in and been entrusted by the University Court with the conduct of the medical education of women. The Carnegie Trust had now come to their help, and furnished them with an excellent, well-equipped bone room and dissecting room. Another important step forward had been made in the appointment of women demonstrators in anatomy and physiology. Sir William Turner declared the rooms open, and expressed the pleasure which it gave the Court to see the admirable new accommodation provided for the women studying anatomy.

New Pavilions for Consumption in the Edinburgh City Hospital.

So long ago as 1906, accommodation for pulmonary tuberculosis was provided by the local authority in the Edinburgh Fever Hospital, and since then the number of beds, only for advanced cases, has increased from 50 to 82. After the Insurance Act came into force, it devolved on the Town Council to provide for the disease in all its stages, and as the Colinton Fever Hospital had 700 beds, of which never more than 400 were occupied, it was decided to utilise the accommodation there for the treatment of phthisis. An arrangement was therefore made with the Insurance Committee to take over their cases at the rate of 25s. per week, and therefore a sanatorium has been made by adding to two of the ordinary pavilions open air shelters of modern type. Eighteen of these have been provided at a cost of £25 each.

There have also been built two large pavilions for 60 patients at a cost of about £4,000. They are built of red wood, with asbestos tiles, and are in the form of loggias, with the usual dressing rooms and service rooms, and ample balconies. There are also a recreation ground and a small golf course, and a scheme of extensive tree planting for shelter has been begun. The patients are under the general supervision of Dr. C. B. Ker, Medical Superintendent, and Dr. James, Consulting Physician to the hospital. It will be possible to grade the patients effectively and to separate completely early, intermediate, and late cases. The last named will, as before, be accommodated in the old stone pavilions, the upper wards being reserved for patients who are so ill that recovery is not to be expected. The new loggias are reserved for early cases, and the shelters for convalescents. At present, there are about 100 patients in hospital, of whom 40 are uninsured persons sent in at the request of the Medical Officer of Health. The total available accommodation amounts to about 180 beds, so that there is still considerable margin.

GLASGOW.

Medical Problems in the Cure of Certain Diseases.

Dr. T. K. Monro, the recently appointed Professor of Medicine (and author of the popular "Manual of Medicine," 3rd edition), delivered his inaugural lecture on October 13th, at the University, and was introduced by Principal Sir Donald Macalister. Professor Monro, in the course of his lecture, indicated some of the important steps by which the science and art of medicine had been advanced, and spoke of some of the medical problems which urgently pressed for solution at the present time. It might, he said, seem a bold thing to some of his hearers to contemplate with any degree of hopefulness the probability that certain diseases which at the present time caused many deaths might be abolished altogether or reduced to a position of relative insignificance in the mortality statistics; and yet that was no unreasonable optimism, as past history and even the experience of the present generation could testify. He instanced the cases of scurvy, leprosy, small-pox, malarial fever, and typhus fever, and he alluded to the enormous reduction which had taken place in the prevalence of tuberculous in England and Wales since Queen Victoria came to the throne in 1837, and in Glasgow during the last half-century.

A Medical Lady Militant.

The proceedings at the sitting in Glasgow of the High Court of Justiciary, on the 15th inst., were diversified by the trial of two suffragettes, one of whom was a lady doctor, Mrs. Elizabeth Dorothea Chalmers Smith. The charge was that of breaking into a west-end mansion and placing certain materials in it with a view to burning the house. The house in question was empty, and was last occupied about ten years ago as the town residence of Sir John Muir, Bart., of Deanston, a former Lord Provost, since whose death it has been in the market. The ladies obtained admission to the house for the pretended purpose of viewing it, and one of them contrived to remain secreted in it. At the trial the prisoners refused the aid of counsel and called no witnesses for the defence, but at the conclusion of the evidence for the Crown argued that there was no case to go to the jury on the legal point of view. The jury found the prisoners guilty, and they were sentenced to eight months' imprisonment. On hearing the sentence, the fashionable and other ladies who thronged the court discharged a fusillade of miscellaneous missiles at the Bench, but did no damage. Three of them were apprehended and will be tried on a charge of assaulting the judge.

The Question of an Inclusive Fee in Medicine.

The extra-mural medical schools are to hold a meeting of representatives shortly, with a view to returning a joint answer to the University's proposal for the institution of an inclusive fee in medicine.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

A PRACTICAL CONSIDERATION OF VACCINE THERAPY.

To the Editor of The Medical Press and Circular.

Sir,—Let me thank your correspondent, Dr. Gabriel, for his very reasonable and apposite question.

The comparison of a vaccine with a dog licking his wound was employed more as a suggestion than as an assertion of fact.

Subjects of pyrrhœa alveolaris generally suffer with more or less constitutional disturbance, of which the pyorrhœa is only a part or link in a vicious circle, and in which a great variety of bacteria are concerned.

But the dog has only a local trouble, and, otherwise presumably healthy, he by licking his wounds may possibly increase his natural immunity during the healing process.

The administration of vaccines by the mouth is still uncertain, and no precise details have at present been established; for the journey of a vaccine from the mouth to the portal blood is necessarily attended by many complications which the more precise method of subcutaneous injection does not involve.

I am, Sir, yours truly,
Wyatt Wingrave.

London Polyclinic,
October 17th, 1913.

THE TEACHING OF SCIENCE.

To the Editor of The Medical Press and Circular.

Sir,—My three boys are now grown up. Twins, aged 23, have finished their education, save for final professional examinations; and the third, aged 21, doing his third year at Cambridge. Before the boys were born, and during the whole period of their growth and development, I gave my best thought to the question discussed in the excellent letter of your correspondent, "L.," in your paper of this week. I would like first of all to call his attention to an article on the subject which appears in the October number of the *Parents' Review* (price sixpence), the organ of the Parents' National Educational Union. It is the wisest, the best-informed, and the best-expressed plea for classics that I have ever encountered. I am ashamed to confess I have forgotten the name of the writer, and, being away from home, I am unable to refer to it. My own opinion is that if a lad has the intellect needed for a scientific vocation, and unless he shows a reasoned antipathy to classics, it will be very much better for his educational and intellectual development if he take up classics, and continue them concurrently with science. Of course, if we want to give a purely narrow utilitarian education, one that may enable the lad to begin to earn money very early, it may be necessary to lead him to so far specialise at the outset. But if we want the lad to be an accomplished professional man in whatever vocation he may finally select, with a wide intellectual horizon, and with the capacity to get out of life the pleasures that wide intellectual interests alone can give, we cannot I believe, do better than make classics an essential part of his education. The teaching of science at all our public schools has vastly improved in late years. My sons were at Tonbridge, and there the laboratories and the apparatus leave little to be desired. There, as well as at many similar schools, the boys can get all the instruction needed to start them on a scientific career.

I am, Sir, yours truly,
Paterfamilias.

Fowey Hotel,
Fowey, Cornwall.
October 9th, 1913.

P.S.—I have brought with me the second volume of the lately-published "Diary of Lady Frances Shelley," and since posting my letter I have come across the following passage (p. 128) in a letter from the great Duke of Wellington to Lady Shelley. The Duke is giving advice with regard to the education of her son for the military profession. It is interesting to note his insistence upon the importance of classics. "If," writes the Duke, "he means to rise in the profession, he must be a master of languages, of mathematics, of military tactics, and of all the duties of an officer. He will not be able to converse or write like a gentleman—much less to perform with credit to himself the duties on which he will be employed—unless he understands the classics, and by neglecting them, moreover, he will lose much gratification which the perusal of them will always afford him; and a great deal indeed of professional information and instruction."

SOME MISCONCEPTIONS OF OZONE.

To the Editor of The Medical Press and Circular.

Sir,—My attention has been drawn to the paragraph which appeared in your issue of the 15th inst., headed "Does Ozone Purify the Air?" and which, without some refutation, is liable to cause a very uneasy feeling among my Company's many clients, quite apart from the million of persons who are daily benefiting from the ventilation installations which my Company have fitted up.

The report itself, so far as facts are concerned, is not entirely inaccurate, although there are one or two serious mis-statements of fact, whilst the conclusion arrived at is evidently biassed. No doubt, the investigations were made and based on the great amount of ignorant claptrap with which the American manufacturers and sellers of Ozone apparatus have surrounded their selling literature. I have several specimens of this literature which I could place at your disposal, and you would agree that the compilers show an amount of ignorance and audacity which the medical faculty in this country accept at its face value. Nobody in his senses, and with the requisite knowledge, would be so foolish as to make such statements as the report which you print contains. The whole value of Ozone, so far as its use in ventilation is concerned, lies in its powerful oxidising effect, and the amount which it is necessary to use for the useful purification of the air is so small that no possible ill-effect can be suffered by anyone breathing such an atmosphere. On the contrary, the investigations of Dr. Leonard Hill, F.R.S., have shown that the use of ozone in this proportion—namely, one part in one million parts of air—is fraught with the greatest benefit, inasmuch as the air is freshened and smell or frowsiness is destroyed, and the result is what must be a beneficial and invigorating atmosphere. I need only draw your attention to the Central London Railway. This is used by many millions of persons per year, and the greatest testimony to its value must be the large number of employees of the Company, who are constantly working in the ozonised atmosphere, and who are most enthusiastic as to the benefits they derive. No one with any knowledge on the subject would attempt to sterilise the air of a place in which human beings were living, by means of ozone. My remarks are also confirmed by a report, which appeared in the *Times Engineering Supplement* of August 27th, on the proceedings of the Society of Heating and Ventilating Engineers of the United States, in which the remarkable air purifying effect of ozone was testified to.

The statement that ozone does not destroy bad odours is absolutely in contradiction to the practical effects of several installations which my Company have fitted up, with the sole object in view of destroying foul odours. I can cite at least one case of an installation which has been the means of putting an end to serious complaints by the inhabitants of a city, due to the nuisance arising from a certain manufacturing process.

There is no doubt whatever that Ozone does absolutely destroy bad smells and does not only mask them, and any statement to the contrary is based on insufficient practical experience.

I trust you will kindly give this letter the same prominence as that of your paragraph, and if anything were wanted to add proof to my statements, I would ask you to glance through the list of a few of the important installations of Ozone Ventilation which my Company have erected in various parts of the world, and which are contained in the enclosed pamphlet.

I am, Sir, yours truly,
Edward L. Joseph, M.I.E.E., F.C.S.,
Managing Director to
Ozonair, Limited.

London, October 20th, 1913.

[We insert the above letter, but must remind the writer that our paragraph of October 15th commented on the work of scientific experts. At its best ozone mixed with air in proportions that can be breathed with comfort cannot, from the facts of the case, be anything but a surface oxidiser. It may mask bad smells, but does it affect the chemical substances and putrefactive micro-organisms that give rise to the odours. It is difficult to imagine on what evidence our correspondent states that "there is no doubt whatever that ozone does absolutely destroy bad smells and not merely mask them?" We do not even know the physcal basis of a smell with any certainty. Emphatic assertion is not science.—Ed. M.P. and C.]

OVERTHROW OF THE VETERINARY ACT.

To the Editor of The Medical Press and Circular.

Sir,—The event which I have over and over again referred to in your columns as inevitable has now come about, and the penal clauses of the Veterinary Act have, like those of the Medical Acts and Dentists Act, been reduced to dead letters. When first placed on the Statute Book, the Veterinary Act promised to afford to dumb brutes the protection refused to the human kind by medical law. At that time, and since, I have recorded in your paper numerous instances which seemed to promise this result.

Soon after the passing of the Act an unqualified man was fined for displaying a sign inscribed "Veterinary forge." This the magistrate held to imply registration under the Act. The man did not appeal. A year or two ago, another man, unregistered, was fined for assuming the designation "Canine and feline specialist." He did not dispute the decision. A case decided in the King's Bench Division on Tuesday last shows that if those convicted under the Act in cases such as I have instanced had carried their cases to a higher court the convictions would have been quashed. In the case disposed of on Tuesday, the Glamorganshire justices had dismissed a case in which the College of Veterinary Surgeons had summoned an unregistered man who had displayed outside his premises a red lamp and a sign each inscribed "Canine surgery." The College appealed. The Judges—Ridley, Scrutton, and Bailhache—agreed in dismissing the appeal with costs. They held that the respondent had only described his premises as a canine surgery, and had not described himself as a canine surgeon. It would be interesting to learn how far the learned judges were influenced by the similar cases under the Medical and Dentists Acts, carried to the House of Lords, which have destroyed the powers of those Acts so far as these were directed to safeguarding the welfare of the public. The preamble of each of the Acts describes the penal clauses as devised to enable the public to distinguish between legally qualified and unqualified practitioners. As the Medical Acts now stand, any quack can with impunity assume the title of "Doctor," whilst the power to use the words "Dental surgery" in advertisements and on signs makes it possible for any ignorant mechanic or unscrupulous quack to palm himself off on the public as a qualified dentist. It is certain that every uneducated farrier of a certain type will avail himself of the new legal right into which he has now come, and a new field for fraudulent quackery will be opened in the veterinary department. It is possible that the Veterinary College will carry the case to the Supreme Court. But it is impossible to believe that they will meet with a better fate than the authorities who have attempted to vindicate medical law before the same august tribunal. The triumph of quackery is so far assured by law. It is certain that the army of rascaldom engaged in this cruel and nefarious trade will make the most of their opportunities.

I am Sir, yours truly,
Henry Sewill.
The Old Rosery, Earlswood Common,
October 15th, 1913.

OBITUARY.

SIR JOHN BATTY TUKE, M.D., F.R.S.E.

By the death of Sir John Batty Tuke, which took place in Edinburgh on October 13th, the medical profession in Scotland has lost one of its most conspicuous figures. Dr. Tuke was a Yorkshireman, but he had for so long been identified with Edinburgh that most of his colleagues had come to look on him as a countryman, and although he was ever proud of being a Yorkshireman his interests all lay in the land of his adoption. He was born at Beverley in 1835, but was educated at the Edinburgh Academy, and took his M.D. in Edinburgh in 1856. After graduation he served in the Maori War, and acted as Senior Medical Officer to the forces from 1860 to 1863. On his return to Scotland he determined to specialise in mental disease, and became first Assistant at the Royal Asylum, Morningside, and then Superintendent of the Fife and Kinross Asylum. In 1873 he became joint owner of Saughton Hall private Asylum, which later passed entirely under his own control, and on its passing into the hands of the Corporation some years ago the institution was transferred to another suburb of Edinburgh under the name of New Saughton. Sir John Tuke rapidly acquired the confidence of his professional brethren, not only in his own speciality, but as a councillor and leader in affairs generally. He was twice Morrison Lecturer, in 1874 and in 1894; he was President of the Psychological Section of the British Medical Association in 1895; he was President of the Neurological Society, and of the Medico-Chirurgical Society of Edinburgh. He did good work for his College as its president (1898) and as its representative on the General Medical Council from 1887 to 1912. His great claim to remembrance, however, was the part he played in organising the laboratory of the Royal College of Physicians. The proposal at one time met with much opposition, and although it would be too much to say that it owed its inception to him, without Tuke as its advocate it might never have come into existence. He ever took the deepest interest in the laboratory, and in so doing he was one of those to whom Edinburgh must always look as an ardent apostle of the importance of original research. In research and in medical education Tuke took a deep and enduring interest, and although his own contributions to medical literature were not numerous he was keenly appreciative of the advances made by others, and alive to the directions in which fresh work was required. Sir John Tuke was a D.Sc. (*hon. causâ*) of Trinity College, Dublin, and an LL.D. of his alma mater. He represented St. Andrew's and Edinburgh Universities in Parliament from 1900 to 1910, succeeding Priestly, and succeeded by Sir Robert Findlay.

Sir John Tuke was a man who wielded a great deal of influence by reason of his wide knowledge of men and affairs. He was a loyal friend and had many devoted adherents. A keen sportsman, he delighted in having his house filled with guests, to whom he played the part of the courtly, considerate host to perfection. He married a daughter of the late Rev. John Magee, Drogheda, and is survived by his widow and several children, one of whom has for a number of years been associated with him in the conduct of New Saughton Hall.

DR. MATTHEW MARTIN, OF GLASGOW.

The deceased, one of the best-known medical practitioners in the east end of Glasgow, died very suddenly on the 10th inst. Shortly after midday he became ill and dropped down at the corner of Soho Street and Gallowgate. He died before assistance could be rendered. A few minutes before he was chatting with a friend. Dr. Martin graduated at Glasgow University in 1882, and was for 30 years a member of Glasgow Parish Council. A few days before his death he was asked to become a candidate for a vacancy in the Town Council. Dr. Martin's sudden death recalls the equally sudden death, by accident, of his father, Bailie James Martin, in 1887, who was asphyxiated by a dense mass of fumes descending upon him and others from a monster blast which a municipal party had gone to witness on Loch Fyne side.

MAJOR H. C. FRENCH, R.A.M.C.

We regret to announce the death of Major Herbert Cumming French, R.A.M.C.,, which took place last week at the early age of 43. The deceased, who was the son of Major-General Sir George French, served in the South African War in the Transvaal, and in the operations in the Orange River Colony, from 1901 to 1902, and was awarded the Queen's medal with two clasps. He was a War Office Specialist on the subject of Dermatology at Cairo, 1904, Woolwich, 1905-1908, and Malta, 1909. At King's College Hospital, where he was medically educated, he had a brilliant career as a student. In 1891 he was the resident Warneford scholar, and in the following year held a senior scholarship. Major French was a silver medallist of the Royal Humane Society, and also held the Royal Albert medal. He was M.R.C.S., L.R.C.P.Lond., and had been a Hunterian Professor at the former College.

SPECIAL REPORTS.

LUNACY IN IRELAND. (*a*)

The steep ascension of the curve of incidence and the comparative ineffectiveness of all our treatment renders the lunacy problem one of the first importance. The cost of maintaining lunatics, who are almost entirely non-productive, is a heavy drain on a country where one in every 176 of the population is under care for insanity, as is the case in Ireland. The number of lunatics is steadily increasing, albeit the increase for 1912—184—is less by 77 than that of 1911, and 118 less than the average increase for the previous ten years. This crumb of comfort is far from satisfying. From 1880 to 1912 the total increase of lunatics under care has been 11,857, and this does not include the insane who reside at home or with relatives or wander at large. The only way we can estimate these is by the general census returns, and at the last one in 1911 their number is given as 1,221, which brings the Irish lunatic total for 1912 to 23,994. These figures are abundant testimony to the fundamental poverty of our knowledge of insanity. We know not, but we know that we know not; and much good work is being done in the hope that we shall finally know. At present all we can do is to see that the methods of treatment that we have found best are carried out intelligently and conscientiously.

The Report shows that in Ireland work is being well done. The reports on inspection of the different district and private asylums and lunatic wards in workhouses are favourable. Faults, of course, are found, especially in the latter class of institution, but they are of minor importance, and mostly concerned with details affecting rather the standard of comfort than the actual well-being of patients. It is agreeable to note that in the eight cases of suicide, accidental death, etc., the inspectors did not find it necessary to censure the authorities in charge.

The Report shows on the whole the lamentable weakness of our attack on insanity and the careful and conscientious manner in which we are applying such methods as seem best in the present state of our knowledge.

(*a*) "Sixty-second Annual Report of the Inspectors of Lunatics (Ireland) for the year ending December 31st, 1912." London, for H.M. Stationery Office. 1913. Price 11½d.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

- **Bailliere, Tindall and Cox** (London).
  - Text-book on Gonorrhœa and its Complications. By Prof. Georges Luys, M.D. Translated and edited by Arthur Foerster, M.R.C.S., L.R.C.P.Lond. With 203 coloured and plain illustrations. Pp. 404. Price 15s.
  - Sleeping Sickness and the Island of Principe. By Surgeon-Captain Bernardo F. Bruto da Costa. Translated by Lieut.-Col. J. A. Wyllie, F.R.G.S. Illustrated. Pp 90. Price 2s. 6d. net.
  - Manual of Operative Surgery, with Surgical Anatomy and Surface Markings. By Duncan C. L. Fitzwilliams, M.D., Ch.M., F.R.C.S.Eng. Pp. 458. With 284 illustrations. Price 10s. 6d.
  - Sciatica, a Fresh Study. By William Bruce, LL.D., M.D. Pp. 186, with 18 plates. Price 5s.
  - Map Scheme of the Sensory Distribution of the Fifth Nerve (Trigeminus), with its Ganglia and Connections. By L. Hemington Pegler, M.D., M.R.C.S., Senior Surgeon Metropolitan Ear, Nose and Throat Hospital, etc. Printed in 15 colours and mounted on rollers for hanging up (size 4 by 5 feet), or folded in cloth cover (size 8½ by 11 inches). Price 21s. net.
  - An Introduction to the Study of Infection and Immunity. By Charles E. Simon, B.A., M.D. Second edition revised and enlarged and illustrated. Pp. 325. Price 14s. net.
- **Bale, John, Sons and Danielsson, Ltd.** (London).
  - Compendium of the Pharmacopœias and Formularies. By C. J. S. Thompson. Fourth edition. Pp. 360. Price 5s.
- **Benger and Co., Ltd.** (Manchester).
  - Alimentary Enzymes in Theory and Application. With special reference to their use in treatment and dietetics. The Benger's Food Co. With 10 photographic plates.
- **Cambridge University Press.**
  - Trachoma and its Complications in Egypt. By A. F. MacCallan, M.D., F.R.C.S. Pp. 74. Price 7s. 6d. net.
- **Chapman and Hall, Ltd.** (London).
  - Elements of Water Bacteriology. By S. C. Prescott and C. E. A. Winslow. Third edition. Rewritten Pp. 318. Price 7s 6d. net.
- **Churchill, J. and A.** (London).
  - St. Thomas's Hospital Reports. New Series. Edited by Drs. J. J. Perkins and C. A. Ballance, M.B.Lond., F.R.C.S. Pp. 230.
  - Diseases of the Rectum and Anus. By Harrison Crisp, F.R.C.S. Fourth edition. Pp. 588. Price 10s. 6d.
  - Cancer of the Rectum, its Surgical Treatment. Sixth edition. By Harrison Crisp, F.R.C.S. Pp. 256. Price 5s.
  - Transactions of the Ophthalmological Society of the United Kingdom. Vol. XXXIII. Pp. 242. Price 12s. 6d.
  - Researches on Rheumatism. By F. J. Poynton, M.D., F.R.C.P.Lond., and Alex Paine, M.D., D.P.H. With 106 illustrations, plain and coloured. Pp. 461. Price 15s.
- **King, P. S., and Son** (Westminster).
  - The Deaf. Handbook of information and statistics. Compiled by the National Bureau. Pp. 75.
- **Lewis, H. K.** (London).
  - Hæmocytes and Hæmic Affections. By F. W. G. Burnham, M.D., C.M. With 226 microphotograms. Pp. 462. Price 25s.
  - Practical Bacteriology, Blood Work and Animal Parasitology. B. G. R. Stitt, A.B., Ph.G., M.D., U.S.A. Third edition, with 4 plates and 106 other illustrations. Price 6s. 6d.
  - Lectures on Tuberculosis to Nurses. By Oliver Bruce, M.R.C.S., L.R.C.P. Illustrated. Pp. 134. Price 2s. 6d. net.
  - Manual of Operative Surgery. By J. F. Binnie, A.M., C.M.Aber. Sixth edition revised and enlarged and illustrated. Pp. 1251. Price 30s. net.
- **Lippincott, J. B., Co.** (Philadelphia).
  - Treatment of Internal Diseases. By Prof. Norbert Ortner. Translated by F. H. Bartlett, M.D. Second edition in English. Edited by N. B. Potter, M.D., New York. Pp. 643. Price 21s.
  - The Psychoneuroses and their Treatment by Psychotherapy. By Drs. J. Dejerine and E. Gauckler. Translated by Smith E. Jelliffe, M.D., Ph.D. Pp. 396. Price 18s.
- **Longmans, Green and Co.** (London).
  - Gray's Anatomy. Eighteenth edition. Edited by Prof. Robt. Howden, D.Sc., C.M. Assisted by A. J. Jex-Blake, B.Ch., F.R.C.P., and W. F. Fedden, M.S., F.R.C.S. Pp. 1311. With 1,120 illustrations, plain and coloured. Price 32s.
  - The National University of Ireland. Calendar for the year 1913. Pp. 480.
- **Macmillan and Co.** (London).
  - The Nervous and Chemical Regulators of Metabolism. Lectures by Prof. D. Noel Paton, M.D., B.Sc. Pp 228. Price 6s.
- **Rebman and Co., Ltd.** (London).
  - Compendium of Regional Diagnosis in Affections of the Brain and Spinal Cord. By Robt. Bing. Translated by F. S. Arnold, M.B., B.Ch. Second edition. Pp. 222.
  - An International System of Ophthalmic Practice. By W. L. Pyle, M.B., Philadelphia. Ophthalmic Seismology by C. H. Beard, M.D. Pp. 400. Price 21s.
  - Therapeutics of the Gastro-Intestinal Tract. By Drs. Carl Wegele, M. H. Gross and I. W. Held Pp. 329. Price 12s. 6d.
  - A Course of Normal Histology. By Rudolf Krause. Translated by P. J. R. Schmahl, M.D., New York. Pp. 406. Price 25s.
- **Reeves, William** (London).
  - The Art of Vocal Expression. A Popular Handbook. By Rev. Chas. Gibb. Pp. 91.
- **Saunders, W. B., Co.** (Philadelphia).
  - Collected Papers by the Staff of St. Mary's Hospital Mayo Clinic, Rochester, U.S.A. 1912. Pp. 842.
  - Massage, its Principles and Technic. By Max Bohm, M.D. Translated by C. F. Painter, M.D., Boston. Pp. 91. Illustrated.
  - The Elements of Bacteriological Technique. By J. W. H. Eyre, M.D. Pp. 518, with 219 illustrations. Price 13s.
  - A Laboratory Manual of Invertebrate Zoology. By G. A. Drew, M.D. Second edition. Pp. 213.
  - Blood Pressure from the Clinical Standpoint. By Francis Ashley Faught, M.D. Illustrated. Pp. 281. Price 13s. net.
- **Taylor and Francis** (London).
  - Calendar of the Royal College of Surgeons of England. August 1st, 1913. Pp. 398. Price 1s.
- **The Ophthalmoscope Press** (London).
  - Guide to the Microscopic Examination of the Eye. By Prof. Greeff, Berlin. Translated by Hugh Walker, M.B., C.M. Pp. 86. Price 7s. 6d.
- **Truth Publishing Co., Ltd.** (London).
  - Minor Statesmen from Truth. Pp. 151. Price 1s.
- **Unwin, T. Fisher** (London).
  - Lord Lister, his Life and Work. B. G. T. Wrench, M.D.Lond. Pp. 384. Price 15s.
- **Urban and Schwarzenberg** (Berlin).
  - Pathologisch-Anatomisches Praktikron. Von Prof. Dr. Richard Oestreich. Pp. 304.
- **Wright, John, and Sons, Ltd.** (Bristol).
  - Pye's Elementary Bandaging. Thirteenth edition. Revised by W. H. Clayton-Greene, M.B., F.R.C.S., and V. Zachary Cope, M.D., F.R.C.S. Pp. 230. Price 2s.
  - A Synopsis of Midwifery. By A. W. Bourne, M.B., F.R.C.S. Pp. 212. Price 5s.

LITERARY NOTES.

We understand that Professor Dawson Turner, of Edinburgh, has a new edition in the press of his work on "Radium, its Physics and Therapeutics," which will embody the most recent researches on the subject. The author is an acknowledged authority, having made radium his especial study; his researches and views on the subject now so much to the fore, will be looked for with considerable interest.

* * *

The "Calendar" for 1913 of the National University of Ireland reaches us seasonably with the beginning of the winter session. The text of the Irish Universities Act, 1908, and the University Charter are printed in full. The usual information as to courses of study and examinations is given. Lists of names include not only the officials and graduates of the University, but also the officers of its three constituent colleges.

* * *

Our contemporary, the "Indian Medical Record," announces that in consideration of the prevalence and mortality of tuberculosis in India, and that it is making rapid progress in that country, it has been decided to make a special issue of that journal as a "Tuberculosis Number." This special issue will contain valuable contributions from the pen of those who have devoted much time in the investigation of this disease. The Editor will also be glad to receive any articles or short notes on the subject bearing on its prevention and treatment based on personal experience from medical men for publication in this number, which should reach the office (Calcutta, India) by the middle of November, 1913.

* * *

We are asked to announce that the next award of the Alvarenga Prize by the College of Physicians of Philadelphia, amounting to about 180 dollars, will be made on July 14th, 1914, provided that an Essay deemed by the Committee of Award to be worthy of the prize shall have been offered. Essays intended for competition may be upon any subject in medicine not previously published. They must be typewritten, and if in a language other than English, should be accompanied by an English translation, and must be received by the Secretary of the College on or before May 1st, 1914. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author.

NEW PREPARATIONS.

"TABLOID" ADJUSTABLE HEAD DRESSING.

As a means of fixing dressings on the head, the "Tabloid" Adjustable Head Dressing of Burroughs Wellcome and Co., which is now issued in a large size, deserves the notice of all medical practitioners. It consists of a cap, split at one side to render it adjustable, and having a back-piece covering the nape of the neck. To the cap a bandage is attached, while the back-piece carries tapes. A pad of double cyanide gauze and a safety pin are enclosed with the head dressing for use in first-aid cases. It is applied by slipping the cap over the head and passing the bandage portion round the back of the head, across the forehead, and back again to the starting point, where is is fixed with a safety pin. The tapes attached to the back-piece are tied under the chin, so allowing the bulky dressings to be covered in and secured. For use in operations on the eye, ear, nose and throat the adjustable head dressing affords great advantages over a towel, which is insecure and uncomfortable for the patient and, from its bulk, apt to get in the way of the surgeon and to be displaced. It also affords a ready means of covering the head in the treatment of ringworm, favus, impetiginous conditions of the scalp, and so forth. Numerous applications will readily occur to anyone using it.

BAYER'S HYDRASTININE (SYNTHETIC). HÆMOSTATIC.

While the hæmostatic value in gynæcological practice of the rhizome of hydrastis canadensis is well established, the ordinary galenical preparations are unsatisfactory, being unpleasant in taste and uncertain in composition. The active principle of the rhizome is the alkaloid hydrast*ine*, and from this alkaloid may again be prepared by an oxidation process hydrast*inine*, which provides not only a means of *standardised* hydrastis treatment, but removes from such treatment certain disadvantages. Messrs. Bayers have found it possible to prepare hydrastinine synthetically, the artificial product being identical both as to composition and therapeutic action with that obtained from the rhizome. Synthetic hydrastinine hydrochloride is a white powder, soluble (1 in 1) in cold water.

For hydrastinine is claimed the advantages over hydrastine that its action as a hæmostatic (and especially a uterine hæmostatic) is more powerful and lasting, that it has no depressant action on the heart, and that it does not cause tetanic spasms. Its action may be briefly epitomised thus:—(1) It stimulates the medulla; (2) it causes a powerful contraction of the peripheral vessels; (3) it causes contraction of the uterine muscle; (4) it is a useful stomachic and tonic. It is also worthy of note that hydrastinine hydrochloride acts immediately, while other preparations of hydrastis require several days before producing any effect. It is supplied by Messrs. Bayer in bottles of ½ and 1 gramme.

MEDICAL NEWS IN BRIEF.

Society for Relief of Widows and Orphans of Medical Men.

At a quarterly Court of the Directors of this Society held on Wednesday, Sir Thomas Boor Crosby, President, in the chair, twenty new members were elected. The sum of £523 was voted to be distributed among th widows and orphans at Christmas, each widow to receive £10, each orphan £3, and each orphan on the Copeland Fund £10. It was resolved that the income from the Brickwell legacy be utilised as follows:—

(1) That the legacy received from the late Mr. James Brickwell be known as the "Brickwell" Fund, and any grant made from it be marked as coming from that fund.

(2) That the grants to widows over the age of 65 may be increased by £25 per annum.

(2a) That the grants to widows under the age of 65 may be increased by £10 per annum.

(3) That the grants under the Copeland Fund may be increased from the Brickwell Fund by £20 per annum.

(4) That an increased grant of £15 per annum may be made to the orphans, other than those in receipt of grants under the Copeland Fund.

(5) That the residue of income be kept on deposit and utilised as directed by the Court of Directors.

The total amount of the Brickwell legacy is £37,250, yielding an annual income of £1,325 10s. The invested funds of the Society now stand at £139,500. Relief is only granted to the widows and orphans of deceased members. Membership is open to any registered medical practitioner who at the time of his election is resident within a radius of 20 miles of Charing Cross. The annual subscription is two guineas; special terms for life membership. Further particulars and application form for membership may be obtained from the Secretary at the Offices of the Society, 11 Chandos Street, London, W.

Electrolysis in Lead Poisoning

At a provincial sessional meeting of the Royal Sanitary Institute at Newcastle-on-Tyne on Saturday last, Mr. T. M. Clague gave a demonstration of his system of treating cases of industrial lead poisoning by electrolysis, and furnished an account of the successful tests made by Sir Thomas Oliver, M.D. Experiments had demonstrated that metal poisons were removed from the human body by electric baths, applications being made to the feet, arms, and other parts of the body.

Professor Sir Thomas Oliver, M.D., said a weekly hot-water bath for lead workers was required by the Home Office, and he suggested the substitution of the electrolytic bath. He stated that, under this treatment, the blue line in the gums, which was a characteristic indication of lead poisoning, disappeared.

An American Ward in the London Hospital.

It is reported that a fund has been started, known as the American Ward London Hospital Fund, the object of which is to endow a ward in the London Hospital for Americans, to be supported by Americans. Among those who have become patrons and subscribers are Lady Barran, Mrs. Otto Beit, Lady Arthur Butler, the Hon. Mrs. C. Coventry, Lady Randolph Churchill, Mrs. Anthony J. Drexel, the Countess of Essex, Lady Alastair Innes-Ker, Mrs. Rudyard Kipling, the Hon. Mrs. R. C. Lindsay, Viscountess Maidstone, Lady Maxim, Lady Maxwell, Lady Naylor-Leyland, Lady Malcolm of Poltalloch, and Mrs. M. F. Ronalds.

The Norfolk and Norwich Hospital.

The Lord Mayor of Norwich (Mr. Arthur M. Samuel) presented at a meeting of the Governors of the Norfolk and Norwich Hospital, last week, a cheque for £2,500 in liquidation of the accumulated deficiencies in the funds of the hospital, which in December last amounted to £5,040. This was in fulfilment of a promise the Lord Mayor made last June, the condition being that other friends of the hospital would contribute an equal sum before the expiration of his year of office.. This met with a liberal response, £2,700 having been subscribed within a few days of Mr. Samuels' offer.

University College Hospital.

The treasurer has received from a donor, who wishes to remain anonymous, the sum of 100 guineas as an expression of his admiration and appreciation, from personal observation, of the skill, invariable kindness, and admirable nursing accorded to the patients at University College Hospital.

Haslar Royal Hospital.

The distribution of prizes to the acting surgeons on the completion of their course at the Royal Hospital, Haslar, took place last week in the library of the institution. The presentations were made by Adm. the Hon. Sir Hedworth Meux, Commander-in-Chief at Portsmouth. Acting-surgeon A. M. Henry, of Guy's Hospital, was awarded the gold medal for the best total of marks obtained on entry at Greenwich and Haslar, and also a prize for the highest marks at the Greenwich Examination. Acting-surgeon G. F. B. Page, Edinburgh University, took the silver medal. Commissions as surgeons in the Royal Navy were afterwards handed to 14 officers.

Sir Jonathan Hutchinson's Museum.

At a meeting held at Haslemere last week a subcommittee was appointed to prepare a scheme for the future maintenance of the Haslemere Educational Museum, founded by the late Sir Jonathan Hutchinson. It is hoped that their report will be presented at a future meeting, which will probably be public.

Mr. Aneurin Williams presided, and it was announced that Mr. Jonathan Hutchinson, writing on behalf of the trustees of the late Sir Jonathan Hutchinson's estate, had stated that if it were found possible to raise the necessary endowment fund, the trustees were willing to hand over by deed the freehold site and the museum with all its contents to a suitable trust committee. It was also intimated that other members of the Hutchinson family were prepared to give substantial monetary help to any fund which it might be proposed to raise. The value of the site is estimated by the trustees at about £4,000, and the money spent by the founder upon the buiding and the collection was probably upwards of £20,000. The trustees are willing to maintain the museum for another 12 months in order to give the committee time to deal with the situation.

In a letter regretting his inability to be present Sir Archibald Geikie (President of the Royal Society), wrote:—"For the quiet but helpful teaching which the museum has afforded to thousands of learners every year for so long a time we are under a debt of sincere gratitude to the liberal mind and generous public spirit of its illustrous founder, and we owe it to Sir Jonathan Hutchinson's memory to ensure that the institution which he created, and for so many years supported at his own cost, should not suffer by his death, but be continued and maintained in full efficiency.

Society of Medical Officers of Health.

The annual dinner of the Society of Medical Officers of Health was held last week at the Hotel Great Central, Dr. A. K. Chalmers, president, occupying the chair. Among those present were Sir Francis Champneys (president of the Royal Society of Medicine), Sir Thomas Barlow (president of the Royal College of Physicians), Sir Amherst Selby-Bigge, Dr. A. Newsholme, Surgeon-General Baptie, V.C., Sir Shirley Murphy, Dr. Harmer, Baillie E. McConnell (convener of the Committee on Health, Glasgow Corporation), and Professor Sims Woodhead.

Nominations for Edinburgh Chair of Clinical Medicine.

In accordance with the new arrangement come to between the University of Edinburgh and the Royal Infirmary, it falls to a Joint Committee of seven members from the University Court and the Royal Infirmary to make nominations to the Court for the new Moncrieff Arnott Chair of Clinical Medicine. At a meeting of the Joint Committee held on Saturday, Dr. William Russell and Dr. Graham Brown were selected from a list of applicants for the Professorship, and the names of these gentlemen will be submitted to the University Court, which will meet on the 20th of this month, to make the appointment. Drs. Russell and Brown are both associated with the Royal Infirmary, and act as senior lecturers on Clinical Medicine in the University.

Royal Sanitary Institute.

The following medical members have been elected during October:—Andrew Balfour, M.D., B.Sc.Ed., D.P.H.Camb., Edward A. Brash, L.R.C.P.Lond., M.R.C.S.Eng. (M.O.H.), Thos Buckham, M.B., B.S. (M.O.H.), L. T. Burra, M.B., B.Ch.Oxon., M.R.C.S., Robert V. Clark, M.A., M.B., B.Sc.Ed., D.P.H., James A. Dalmege, M.R.C.S.Eng., L.R.C.P., D.P.H. Lond., Thomas E. Francis, D.P.H.Lond., Herbert E. Goulden, M.D.Durh., D.P.H.Camb., John Lambie, M.D., D.P.H., Alex. R. M. MacIlraith, L.R.C.P., L.R.C.S.Ed., Stewart McNaughton, M.B., D.P.H. Camb., Shobba Ram, M.B., B.A., D.P.H.Lond., Alex. W. F. Sayres, M.D., M.R.C.S., D.P.H., Percy H Stirk, M.R.C.S., D.P.H., Reginald W. Stocks, L.R.C.P., M.R.C.S., D.P.H., George B. Wray, M.R.C.S.Eng., D.P.H.Lond.

Prevention of Infant Mortality.

A second Post-Graduate Course on the Feeding and Care of Infants will be held from January 12th to January 22nd, 1914, under the auspices of the National Association for the Prevention of Infant Mortality and for the Welfare of Infancy. A strong Advisory Committee has already been formed, the members including Sir Thomas Barlow, Dr. W. Hale White, Dr. E. W. Hope, Dr. James Kerr, Professor C. J. Martin, Sir Shirley Murphy, Dr. Arthur Newsholme, Sir William Osler, Sir John Tweedy and others. This Course will be on the same lines as those which proved so successful in the first, but there will, in addition, be an evening lecture each day. A full syllabus and further particulars will be obtainable shortly from the Secretary of the Association at 4, Tavistock Square, London, W.C.

Sleeping Sickness Inquiry Opened.

The Departmental Committee on African Diseases began its inquiries recently at Winchester House, London. The Committee, of which the Earl of Dysart is chairman, is asked by the Government to report upon (1) the present knowledge available on the questions of the parts played by wild animals and tse-tse flies in Africa in the maintenance and spread of trypanosome infections of man and stock, (2) whether it is necessary and feasible to carry out an experiment of game destruction in a localised area in order to gain further knowledge on these questions, and, if so, to decide the locality, probable cost, and other details of such an experiment, and to provide a scheme for its conduct, (3) whether it is advisable to attempt the extermination of wild animals, either generally or locally, with a view of checking the trypanosome diseases of man and stock, and (4) whether any other measure should be taken in order to obtain means of controlling these diseases. The first witness was Surgeon-General Sir David Bruce, who has been in charge of the Royal Society's Sleeping Sickness Commission in Nyassaland. The inquiry was not open to the Press.

University of Oxford.

At a congregation held on October 16th, the following degrees were conferred:—

D.M.—A. T. Waterhouse, Balliol; G. D. H. Carpenter, Non-Collegiate.

B.M.—G. W. Carte, New College.

University of Cambridge.

At a congregation held on October 17th, the following degrees were conferred:—

M.D.—C. B. Heald and G. W. Twigg, Caius; K. Comyn (by proxy), Selwyn.

M.B. and B.C.—R. Gamlin and A. E. Herman, King's; A. C. Roxburgh, Trinity; L. W. K. Scargill, Trinity Hall; G. A. Smythe, Emmanuel.

M.B.—C. C. H. Binns, Caius; L. T. Rutherford (by proxy), Clare; T. E. Osmond, Emmanuel .

B.C.—R. S. Morshead, Trinity.

Royal College of Surgeons of Edinburgh.

The following candidates having passed the requisite examinations, on July 12th, 1913, were admitted Fellows on Thursday, October 16th:—Henry E. Arbuckle, M.D.Ed., D.P.H.Camb., James F. Bennett, M.B., Ch.B.Glasg., John D. Fiddes, M.B., Ch.B. Aberd., Percy L. Foote, M.B., Ch.B.N.Zeal., M.R.C.S., L.R.C.P., McWilliams Henry, L.R.C.S.E. (triple qual.), Harry F. Holmden, M.B., Ch.B.Ed., Harris C. Mersereau, M.D., C.M.McGill, John J. H. Nelson, M.D.Edin., Adreshir B. Pestonji, L.M. and S.Bombay, M.R.C.S.Eng., L.R.C.P., D.P.H.Camb., Richard F. Steel, M.B., Ch.B.Dub., Howard M. B. Stratford, M.R.C.S.Eng., L.R.C.P., Arthur R. Thomas, M.R.C.S.Eng., L.R.C.P., Stephen H. Middleton-West, M.B., Ch.B.Vict.Univ.Man., M.R.C.S. Eng., L.R.C.P., and Hiram B. Wyman, M.D., C.M. McGill, L.R.C.S.E. (triple qual.).

A case of some importance to medical practitioners—namely, that of "spotted fever," was recently notified to the Metropolitan Asylums Board from Camberwell (London), and the patient was removed to the South-Eastern Fever Hospital. This is the third notification of this disease to the Board within the past week or two.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

M.B.CANTAB. (London, N.).—The influence of menstruation upon the temperature of the body is well known. Recent observations by Hansen show that menstruation brings a temperature wave rising high just before the menses and falling below the normal afterwards, beginning to rise again about a fortnight before the date of the next menstrual epoch.

F. E. R. (Norfolk).—Most byelaws dealing with the construction, etc., of ashpits provide that they shall not exceed three cubic feet in size—i.e., sufficient for one week's refuse. It is imperative that a tightly-fitting cover be fixed, and it should be elevated at least 9 in. above the ground. No ashpit should be placed so that its contents are inaccessible to easy inspection and removal.

DR. J. H. (Somerset).—A good foot powder, which may be sprinkled within the socks in cases of hyperidrosis, is salicylic acid, 1 part; rice powder, 10 parts; talc 40 parts.

Meetings of the Societies, Lectures, &c

WEDNESDAY, OCTOBER 22ND.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Mr. Colyer.

THURSDAY, OCTOBER 23RD.

ROYAL SOCIETY OF MEDICINE (SECTION OF BALNEOLOGY AND CLIMATOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Presidential Address: Dr. F. A. de T. Mouillot: Some Lessons derived from Twenty Years of Spa Practice. The Annual Dinner will be held at 7.15 p.m., the same evening at the Waldorf Hotel, and the following are expected as guests of the Section:—Sir Malcolm Morris, Sir Philip Magnus, and Dr. A. Manuel.

FRIDAY, OCTOBER 24TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN) (1 Wimpole Street, W.).—4.30 p.m.: Cases by Dr. C. E. Zundel, Dr. E. A. Cockayne, Dr. J. Porter Parkinson, Dr. T. R. Whipham, Dr. F. Langmead. Pathological Specimens: Dr. J. Porter Parkinson, Dr. J. D. Rolleston.

ROYAL SOCIETY OF MEDICINE (SECTION OF EPIDEMIOLOGY AND STATE MEDICINE) (1 Wimpole Street, W.).—8.30 p.m.: Paper: Dr. W. M. C. Wanklyn: Working-class Home Conditions in London.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. Keith.

MONDAY, OCTOBER 27TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Discussion on "The Visceral Complications met with in Hysterectomy for Fibroids and the best Method of Dealing with Them," to be introduced by Sir John Bland-Sutton.

ROYAL SOCIETY OF MEDICINE (SECTION OF ODONTOLOGY).—8 p.m.: President's Introductory Address by Mr. C. F. Rilot. Paper: Mr. Stanley P. Mummery: The Conservative Treatment of the Pulp.

TUESDAY, OCTOBER 28TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF MEDICINE).—5.30 p.m.: Sir William Osler, Bart., F.R.S.: Congenital Syphilis of the Liver, with the picture of Banti's Disease. Dr. Poynton, Dr. Armstrong and Dr. Nabarro on Chronic Recurrent Diarrhœa in Childhood. Dr. Gossage and Dr. Braxton Hicks: Two Cases of Non-Cancerous Tumour of the Stomach.

ROYAL SOCIETY OF MEDICINE (SECTION OF PSYCHIATRY).—8.15 p.m.: Demonstration: Dr. J. W. E. Cole: Case of Pellagra with Insanity. 8.30 p.m.: Paper: Dr. Mercier: What is Insanity?

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

WE are asked to announce that a Clinical Meeting of the Society will take place on Wednesday, October 29th, at 4 p.m., at 11 Chandos Street, Cavendish Square, W.

Appointments.

BROCKMAN, R. ST. L., M.R.C.S., L.R.C.P.Lond., Senior House Surgeon at St. Bartholomew's Hospital.

CARTE, G. W., M.R.C.S., L.R.C.P.Lond., Senior House Surgeon at St. Bartholomew's Hospital.

DOLAN, E. M., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Wigton District of the county of Cumberland.

EVANS, A. G., M.R.C.S., L.R.C.P.Lond., Senior House Physician at St. Bartholomew's Hospital

FIDDIAN, J. V., M.R.C.S., L.R.C.P.Lond., Senior House Surgeon at St. Bartholomew's Hospital.

HADFIELD, G., M.B., B.S.Lond., Senior House Physician at St. Bartholomew's Hospital.

KITCHING, R. L., M.B., B.S.Durh., Ophthalmic House Surgeon at St. Bartholomew's Hospital.

Vacancies.

National Maternity Hospital, Dublin.—Intern Assistant Physician. Salary £50 per annum. Applications to Secretary. (See advt.)

Certifying Factory Surgeon.—The Chief Inspector of Factories announces the following vacant appointment:—Chatteris (Cambridgeshire).

Oxford County Asylum, Littlemore, near Oxford.—Assistant Medical Officer. Salary £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent.

The Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road.—Junior House Surgeon. Salary £100 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38 Barton Arcade, Manchester.

West Herts Hospital, Hemel Hempstead, Herts.—Resident Medical Officer. Salary £100 per annum, with rooms, board, and washing. Applications to Robt. L. Butterfield, Clerk to the Hospital.

Lancashire County Asylum, Winwick, Warrington.—Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, attendance, and washing. Applications to the Medical Superintendent.

Glasgow District Mental Hospital.—Junior Medical Officer. Salary £150 per annum, with board, lodging, and laundry. Applications to the Medical Superintendent, Gartloch, Gartcosh.

Glasgow District Mental Hospital, Lenzie.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging, and laundry. Applications to the Medical Superintendent.

Births.

CORBETT.—On October 17th, at 28 Hanover House, Regent's Park, the wife of Dudley Corbett, M.D., of twin daughters.

COX.—On October 19th, at Bannu, North-west Frontier Province, India, to Dr. and Mrs. R. J. H. Cox, C.M.S.—a daughter.

PEARCE.—On October 16th, the wife of John L. Pearce, M.D., Finchingfield, Essex, of a daughter.

Marriages.

ADAMS—WEBB.—On October 14th, at St. Nicholas Church, Chislehurst, Joseph E. Adams, M.S., F.R.C.S., of 40 Devonshire Place, W., to Muriel, youngest daughter of the late Harry Webb and Mrs. Webb, of Southlaund, Chislehurst.

CHURCH—SOMERVILLE.—On October 14th, at St. Andrew's, Wells Street, W., Geoffrey Selby, younger son of Sir William Selby Church, Bt., of Woodside Place, Hatfield, Herts, to Doris Louise Cleghorn, younger daughter of Dr. William Somerville, Fellow of St. John's College, Oxford.

EDWARDS—STANTON.—On October 15th, at Christ Church, Cheltenham, Hugh Anderson Edwards, M.B., Ch.B., Wallsend-on-Tyne, and son of the late Joseph Edwards, Motherwell, Scotland, to Illma Irene Stanton, youngest daughter of the late Alfred Alexander Stanton, of Johannesburg.

PAINTON—EVEN.—On October 15th, at the Church of St. Mary-at-the-Walls, Colchester, Capt. George R. Painton, R.A.M.C., son of G. H. Painton, Esq., Sidcup, Kent, to Aileen Mona, daughter of Colonel G. E. Even, C.B. (Indian Army), and Mrs. Even, of 34 Inglis Road, Colchester.

RIDGE—BAKER.—On October 7th, at Christ Church, Enfield, Middlesex, Edwyn Manners Ridge, F.R.C.S., of New River House, Enfield, fifth son of the late J. James Ridge, M.D., to Gladys Boyne, younger daughter of W. H. Baker, of Bush Hill Park, Enfield.

SCHUTZE—MENDL.—On October 18th, at the Registry Office, St. Marylebone, Harrie Hugo Leslie Schutze, M.D., M.B., younger son of John Schutze, of Hamburg and Melbourne, to Gladys Mendl, only daughter of Mrs. Arthur L. Raphael, of 2 Hanover Terrace, Regent's Park.

Deaths.

ADAM.—On October 19th, at Dingwall, Ross-shire, Scotland, suddenly, John Adam, M.D.

ANGUS.—On October 18th, at his residence, Thornleigh, Bentinck Road, Newcastle-on-Tyne, suddenly, James Acworth Angus, M.R.C.S., L.S.A., in his 78th year.

CARPENTER.—On October 15th, at Wykeham House, Bedford Park, Croydon, Arthur Bristowe Carpenter, M.A., M.B.Oxon., L.R.C.P.Lond., M.R.C.S., in his 60th year.

HAIGH.—On October 13th, at East View, Milnsbridge, Yorks, John William Haigh, L.S.A., aged 43.

KENNEDY.—On October 14th, at 96 Addison Road, Kensington, W., Dr. Samuel Kennedy, aged 85.

MARTIN.—On October 10th, suddenly, at Glasgow, Matthew Martin, M.B., C.M.Glasg., of "Glencairn," Tollcross Road, Glasgow.

SWALLOW.—On October 11th, at Clifton Lodge, Clarence Road, Clapham Park, S.W., James Dodd Swallow, M.D.St. And., M.R.C.S.Eng., L.S.A.Lond., in his 78th year.

WRIGHT.—On October 19th (as the result of an accident), at a private nursing home, Dublin, Edward R. M. Wright, eldest son of Sir Almroth Wright, of 6 Park Crescent, London, and grandson of R. M. Wilson, Esq., of Coolcarrigan, in his 24th year.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, OCTOBER 29, 1913. NO. 18.

NOTES AND COMMENTS.

The World's Tuberculosis Campaign.

THE closing of the International Tuberculosis Congress at Berlin suggests a hope that the nations of the world will one day abandon war amongst themselves and turn their combined forces against such common foes as disease and poverty and other enemies of moral, physical and social progress. It is comforting to find that the world is slowly but surely making headway against the malady. In view of the fact that the specific organism was discovered by Koch only in 1880, the fact that the disease has been materially diminished in 1913 points to a result that may be described in terms of public health as rapid beyond precedent. Much remains to be learnt as to the preventive and the curative aspects of tuberculosis. The use of tuberculin as a remedy is still surrounded with obscurity, and in spite of the enormous amount of work that has been undertaken, there is no generally established system of dosage, and no accepted standardising and therapeutic differentiation of the many varieties of the drug. Prevention in the United Kingdom is in a similar vague and tentative stage of evolution. No strong grip has yet been secured by the State of the tuberculous cows which are almost certainly the cause of a vast amount of tuberculosis, especially in infants. Nor is the control of tuberculous meat of the universal and stringent kind absolutely essential for any system of scientific prevention. Much has been gained, however, in the mere fact that these measures have engaged the serious attention of politicians, especially when one realises the vast interests likely to be penalised by preventive legislation.

Notification.

ANOTHER vexed question in prevention is that of notification, the principle of which has only been recently endorsed by the State. What hope can there be in half measures in dealing with so universal and insidious an infection as that of tuberculosis? Why should we enforce notification in the case of scarlet fever and small-pox, but not in consumption? Why, so far as that goes, should we neglect compulsory notification of measles, whooping-cough, and syphilis, all specific infectious diseases deadly in their nature and preventable in their incidence? The only answer that occurs to one is that the whole system of preventive medicine is yet in its comparatively early stages of development, and that as the result of a series of compromises and of hastened or retarded progress, its present administration is little more than a tangled mass of inconsistencies. The Berlin Congress has dealt with various important details in the tuberculosis campaign. It is proposed to hold an International Tuberculosis Day to be observed by all the nations. A common plan of recording the results of sun treatment and a special investigation of tuberculosis amongst teachers were adopted. A uniform method of pulmonary examination was also recommended. The President, Dr. Bumm, in closing the Congress, announced that the next meeting would take place at Christiania in 1915.

A "New Medical Specific."

THE *County and City of London Observer* of October 18th contains a notice of "a new medical specific." It states that a clinical investigation has lately been carried out on patients in London hospitals. The specific is stated to raise the blood decimal to two degrees above normal. Its composition is described as a combination of natural salts, "certain of which are in a concentrated form, producing a powerful beneficial action upon the blood." The interesting information is appended that this new therapeutic agent has been tested in hospital at the instance of Mr. David Doig, of New Bond Street, chief of the well-known firm of His Majesty's publishers, who supplied the formula of the specific, which had been known and tried by him for many years. It would be interesting to learn what are this gentleman's qualifications for so highly skilled a clinical study as the effect of any given drug or combination of drugs upon the blood. It would be still more interesting to learn upon what conditions a physician has been induced to carry out the series of experiments upon hospital patients, upon the strength of whose report upon the "new medical specific" the *Observer's* notice is based. Apparently Mr. Doig is acting in good faith, for it is stated that, in view of the importance of the result, a copy of the report will be sent on application to him to medical practitioners, members of health committees and others interested. The outcome of this lay incursion into a complex branch of the art of healing may be looked for with some amount of curiosity. Unfortunately, the precise way in which the remedy is to be placed on the market is not mentioned. It is to be hoped that the "physician" and the "hospital" have not been led into a false position, as scientific medical investigations are not usually announced thus by lay newspapers.

The Suffragette Progress.

SEVERAL things of interest have happened in connection with the militant suffragettes during the past few days. In London the raid on the Harley Street windows has been followed by the patrolling of the district by sandwichwomen bearing protests against forcible feeding. Other misguided females have been ostentatiously entering in note-books the names on the brass plates from door to door. When the vigilance of the police becomes somewhat relaxed it may be their intention to smash a few more score pounds' worth of glass—which is not likely to help their cause other than on the downward path. In America, Mrs. Pankhurst—the arch-militant, so to speak, of this ill-balanced crew—has been refused admittance to the country—like Miss Marie Lloyd—as an undesirable alien. On appeal it is reported later that she has been permitted to remain on condition that she does not preach her doctrines. Last week at Bristol reprisals were the order of the day amongst the University undergraduates. Their sports pavilion had been burnt down by the local members of the criminal conspiracy known as the militant section of the suffragettes. In retaliation the students ransacked the suffragette premises and burnt their contents in a street bonfire. It seems tolerably safe to predict that if the patience of the public is taxed much further the desire for vengeance will not be satisfied by the mere burning of a few chairs and bundles of pamphlets. Mr. Lloyd George, who is a firm supporter of the female franchise, pointed out, in a recent speech, the incalculable harm the campaign of violence had brought upon the cause. For one thing, it had destroyed any hope of favourable legislation by the present Parliament. We should imagine the hostility aroused by this orgy of criminal spitefulness will probably outlast the present generation.

A Misfortune to the National Anti-Vivisectionists. Despite our grave and utter disapproval of the anti-vivisectionist views and methods of the Hon. Stephen Coleridge it is impossible to withhold our sympathy over the misfortune that has recently overtaken the affairs of the organisation for which he has toiled so long and so wholeheartedly. Briefly, the National Anti-Vivisection Society has been robbed by its trusted Secretary, Mr. Lionel J. Arbuthnot, of the sum of £6,000. The methods adopted by the defaulter are not unfamiliar. The Society had two banking accounts, and by clever manipulation of these, aided by a Machiavellian use of Mr. Coleridge's friendliness, the money came into the Secretary's possession. The downfall of the official is ascribed, according to one account, to habits of gaming and betting. The amount of the deficit, if we remember aright, bears a close resemblance to the sum collected to defray the damages and costs incurred in the notorious Lind-af-Hageby libel action. It will be of some interest to note with what amount of clemency the Society will regard this criminal action of their official. To be tender-hearted even to the most exquisite pitch in the case of mice, guinea-pigs, pigeons, and other lower animals, does not, in our experience, in any way connote a gentle charity for the peccadilloes of a mere fellow man or woman mammal, no matter how tempted, erring or unfortunate the sinner might have been.

LEADING ARTICLES.

THE FALLING BIRTH-RATE.

The steady fall of the birth-rate that of late years has been more or less universal amongst the civilised races of the Western world presents problems of weighty importance to mankind. It is a mere question of arithmetic in certain instances to say how long a given nation will survive a continuance of diminution at the present rate. The central fact that has to be faced by politicians, by moralists, by religious teachers, by economists, by sociologists, by biologists, and medical men generally, as well as all others interested in this subject, is that women all over the world are declining to bring forth children to the full extent of that maternal fruitfulness with which they have been endowed by nature. The revolt, in a word, is one of women. The results are far reaching in many directions. The position of women in the matter is twofold; first, from the point of view of the mother herself, and, secondly, that of the children. There can be no doubt that the bearing of a large family tends to shorten the life of the individual woman, both by the accidents of actual gestation and the added burdens of maternal and domestic anxiety. Then there is the ever-present problem of the cost of living, which, in recent years, has steadily increased. It needs little argument to prove that the more children the lower is likely to be the standard of living with regard to a given income. It is, indeed, a point of no little significance that the decrease of the birth-rate has proceeded in inverse proportion to the increased cost of living. So far as the output of children is concerned, it is hardly surprising that a kindly, prudent woman should hesitate in bringing children into the world when she is unprovided with the means necessary to place them in a favourable environment as regards food, clothing, housing, education, and other conditions necessary to the uprearing of strong and capable citizens. Here, again, economic considerations play an indispensable part in the determination of conduct. The problem is no new one. Some years ago it was discussed at length in the columns of the Medical Press and Circular, both editorially and in the shape of formal articles by well-known medical men. There is much more to be said upon a subject which so closely affects all classes of society, individually and collectively. For some time past it has engaged the attention of the National Council for the Protection of Public Morals, a body which has many prominent clergymen, doctors, economists, and other distinguished workers amongst its members. Under its auspices a commission has been formed to inquire into the social, economic and racial significance of the falling birth-rate, and to suggest remedies. At a recent meeting held at the London Mansion House, presided over by the Lord Mayor, the matter was brought forward. Among those on the Commission were Dr. T. H. C. Stevenson, the Superintendent of Statistics for the Registrar-General, and Dr. A. Newsholme, Chief Medical Officer of the Local Government Board, with Bishop Boyd Carpenter as President. These names will command respect, and it is to be hoped that their deliberations will be fruitful of good results. The strong ecclesiastical element present in the parent Council reminds one of the change that has recently been evident more or less amongst the churchmen of all beliefs, namely, that it is their duty to succour the spiritual needs of mankind by seeking to advance their material welfare. One of the clerical members remarked that the Commission was not formed to discuss vague moral problems, a sentiment that chimes well with the breezy hopefulness of the Bishop of Birmingham, who thought there were signs that we might be in the dawn of the best age the world has ever seen. If the Commission labour in this spirit they are likely to add to our scientific knowledge of an intricate social problem of overwhelming importance.

THE LABOUR DISPUTE IN DUBLIN.

The labour dispute in Dublin presents features of more interest to students of public health and of social conditions than most industrial struggles, which in themselves are of more importance to the community. In the first place, the class of workers concerned is peculiar. The skilled tradesmen are not affected, except in so far as all industry is hampered by the results of the dispute. The fight is between the unskilled worker and the employer. Moreover, it is not only the unskilled worker in one class of work who is affected. The Transport and General Workers' Union embraces labourers of every class in the city and adjacent country—dock labourers, coal heavers, carters, tramway drivers and conductors, porters, factory hands, agricultural labourers, builders' labourers. As a consequence the employers affected are scattered widely through the community. Some are the biggest shipping firms, carriers, and builders, who employ hundreds or thousands of hands; others are small shop-owners, who perhaps only employ one or two delivery porters. It will be seen, therefore, that two facts stand out as of peculiar importance—that the dispute is unusually widespread and complicated, and that the workers primarily concerned are those whose normal condition is little above extreme poverty. It is not the function of a medical paper to examine the immediate causes which have led to the disastrous dispute, with its sympathetic lock-outs and sympathetic strikes. It is proper, however, to consider in how far the condition of the unskilled labourer in Dublin was such as to create the condition of temper which has rendered some such struggle as this all but inevitable. Mr. Larkin, the labour leader, has declared that it is his mission to preach a gospel of discontent. In Dublin he had no trouble to find material fitted for his purpose. There is no exaggeration in saying that the conditions of life of the Dublin working classes are a disgrace to civilisation. Readers of this paper must be aware that the death-rate in Dublin is the highest in Europe outside Russia. The mortality last year was 22 per 1,000 of the population—about 50 per cent. higher than that of London, Edinburgh, or Paris, and nearly twice that of Brussels, Copenhagen, or Stockholm. The infant mortality is similarly out of ratio to that of other civilised cities. The death-rate under one year of age in Dublin in 1912 was 140 per 1,000 births; in London it was 90; in 76 large provincial towns of England and Wales it was 104. As Sir Charles Cameron points out in his annual report on the health of the city, the mortality, both of children and adults, is specially high in the class described as "hawkers, porters, labourers, etc." They number roughly one-third of the population, and their death-rate last year was 30.6 per 1,000 of the population. Sir Charles assigns the great poverty of this class as the cause of the high death-rate, and there is no doubt that for the unskilled labourer wages are bad and employment uncertain. For these people life on economic conditions is almost impossible, and, even if they were well paid, decent housing cannot be obtained. Almost the only accommodation for the working classes is in tenement houses. These are not buildings erected specially as workmen's dwellings. They are, almost without exception, decayed private residences—some, it is true, large and spacious; others small and cramped. Whatever be their size, few of them have any indoor sanitary accommodation; one water-closet in the yard is used by anything up to fifty people. It is nearly always filthy. In 1912, to quote Sir Charles Cameron again, there were 21,113 one-room tenements occupied by one or more families. In 66 of these there were ten persons, or more, in each. In over 5,000 of them there were five or more in each. The filth and squalor of these houses cannot be described. Public attention has been forcibly directed to their condition by the sudden collapse of two houses a few weeks ago, resulting in the death of some seven persons. Up to the present, though praiseworthy endeavours have been made to provide dwellings for artisans, nothing has been done to meet the problem as far as labourers are concerned. Each slum clearance has increased the congestion all round. If the labour dispute has forced on the authorities the necessity of meeting this problem fairly, the strife and distress of the last two months will not have been wasted. Unfortunately, we cannot find as yet any serious disposition to deal with the matter. A request was made for a Vice-Regal Commission and the Chief Secretary has promised a committee of the Local Government Board *to sit in private.* It is not by this means that the deep-seated discontent of the Dublin workman is to be blotted out, and a plague-spot cleared from our country.

CURRENT TOPICS.

The Cultural Study of Spirochætes.

The demonstration given last week by Dr. Noguchi, of the Rockefeller Institute, New York, before the Royal Society of Medicine, records a further advance in the study of infectious diseases by the application of cultural methods of investigation. Three groups of spirochætes have now been cultivated by Dr. Noguchi, which may be termed tissue, blood, and saprophytic spirochætes. As a rule, ascitic fluid solidified with agar was employed as a culture-medium, and some twelve species of spirochætes have now been cultivated. Certain species need absolute anaerobiosis, while others require a small amount of oxygen to be supplied. In the domain of neuro-syphilology proof has now been given of the presence of the *Treponema pallidum* in the brain in cases of general paralysis. No less than 130 cases have been examined by a modification of Levaditi's method, and the organism was found in 36. Another recent triumph is the demonstration of the spirochæte in the spinal cord in cases of locomotor ataxy, thus removing any possible doubt as to the ætiology of tabes. The same cultural methods have been applied to the study of the virus of rabies, and also of that of poliomyelitis, for even an invisible virus can be grown under favourable conditions. It is a little early to estimate the practical bearing of these new discoveries upon therapeutics, but it is not unreasonable to suppose that a serum or a vaccine for the various forms of syphilis might even take the place of salvarsan or mercury.

London Fogs.

With the falling leaves of autumn come the unwelcome meteorological phenomena which all Londoners know so well. There is something tangible in a real London fog. It envelops, blinds, threatens and mystifies. Only the genuine pea-soup variety is the delight of the country cousin who is "dying to know what a London fog looks like"—and feels like, too—for where is the conjunctiva that can withstand the impact of countless myriad particles of solid carbon and sulphur and yet preserve, unblinking, a stony glare? Citizens of London do not mind fogs; they are used to them. In fact, they would miss them if they never came to remind mankind of approaching Christmas and a big laundry bill. Fogs cannot be called cheap luxuries—rather the reverse, for it has been estimated that a day of darkness in London costs about £5,000 for gas, as well as a large sum for electric light. The depressing effect upon the animal spirits more than counteracts the pleasureable sense of excitement experienced in endeavouring to avoid collisions with persons and inanimate objects. According to observations made by the Coal Smoke Abatement Society, it is estimated that no less than 61,000 tons of solid matter are deposited annually from the atmosphere in the City of London, and a very large proportion of this is waste carbonaceous matter which has its origin mainly in the domestic coal fire and kitchen grate. The gradual replacement of coal as fuel by gas is, to some extent, purifying the atmosphere, but much more yet remains to be done to minimise the inconveniences and dangers of fog. Meanwhile the average Londoner takes his fog, like his bath, as a matter of course.

The Psychology of the Sexes.

The fundamental difference between the mentality of the two sexes is by no means an unimportant factor in education. The quick, intuitive instinct of the female is soon apparent even at school, while the more stolid processes of reasoning which are supposed to be more characteristic of the male type of brain are equally in evidence. It appears that, as far as actual psychological differences between the sexes are concerned, these are less than might be imagined. Such, at any rate, is the opinion of Mr. Cyril Burt, Psychologist to the London County Council, who delivered an interesting lecture the other day on the subject before the Child Study Society of London. He said that until recently psychology had been engrossed in the study of the mental processes as a whole, and had neglected the individual mind. General psychology may have done much for education, but it is possible that individual psychology will do more. As a result of a number of experiments made to obtain data as to the mentality of school children, it has been found that girls and women are more acute in discriminating colours than boys and men. In fact, colour-blindness is extremely rare among females. Again, girls are said to be better visualisers than boys. On the other hand, there is a large number of faculties in which the male sex is superior. As for the innate reasoning powers of boys and girls, these also are as nearly as possible equal. It has further been shown that men are more emotional than women, and, as a matter of fact, very few women have earned distinction as writers of lyrical poetry. Women's emotions may be likened to the ripples on the surface of the water, while men's are deeper, like the ground swell. The experiments referred to, however, have been made only on a small scale, and it is possible that further research may upset the conclusions based on them.

Food in Newspapers.

The reprehensible practice of wrapping up eatables in newspapers is carried on to an extent little dreamt of, perhaps, by those who wonder what becomes of their morning and evening papers when read. These journals accumulate to such a degree that the perplexed housewife is only too glad to get rid of the surplus by selling them in bulk for a few coppers to the "old clothes man," who, in his turn, finds a ready market for them among the proprietors of fried fish shops and small stores. Those papers that are obviously soiled will, no doubt, find their way to the pulp manufacturer's to be "worked up" into various useful articles. The cleaner ones are greedily bought up by the small shopkeepers referred to, who use them for wrapping up all sorts of food, from sweetmeats to fried fish. It is no uncommon thing for a reversed image of the printed matter or actual paper particles themselves to be deeply ingrained upon the food. The matter was brought up the other day at a meeting of the Finsbury Borough Council, when it was pointed out that newspapers were often let to accumulate in dirty rooms, sometimes for years, before they were sold for this purpose. It would be interesting to know the result of a bacteriological examination of old papers. Most probably it would come as a "shocker" to a sensation-loving public, who might be deterred thereby from purchasing food wrapped in any other paper than clean white sheets, such as are used for dispensing purposes. It is useless to insist upon the cleanliness of food if it be served out to the public in filthy coverings.

The X-ray Diagnosis of Kidney Conditions.

The rapid development of X-ray diagnosis is well illustrated in the case of the kidney. A few years ago it was only now and then that a radiographic record could be secured of a renal calculus, not to mention the soft tissues of the organ concerned. Nowadays it is possible to secure an accurate record of the shape of the renal pelvis and of the ureters. In a recent paper on "Pyeloradiography," read before the Royal Society of Medicine, Mr. Frank Kidd discussed the latest phases of this important surgical advance. By injecting the ureters with a 5 per cent. solution of collargol in thin patients, and 7 per cent. in those that were fat, it was possible to obtain an accurate record with a short exposure of fifteen seconds. No anæsthetic is needed for the purpose, but certain precautions had to be observed. The quantity injected was from 4 to 10 cubic centimetres at a pressure not exceeding 30 mm. of mercury. Renal colic has been recorded in cases where too strong a solution of collargol was used, or where pressure or retention had been continued for too long a time. By this method deformities of the pelvis could be readily demonstrated, and it is clear that the surgeon may in future rid himself of the fear of operating upon a single kidney. Amongst other advantages claimed for pyeloradiography are the detection of early dilatation of the kidney pelvis, the differentiation of renal from other tumours, the exact position of a stone, the pre-operative condition of the organ, and the differential diagnosis of pyelitis, pyonephrosis and perinephritic abscess. The advances registered in Mr. Kidd's important paper contribute a fresh chapter to renal surgery, and place in the hands of the surgeon fresh means of accurate diagnosis and of correspondingly accurate operative procedure.

The Calendar of the Royal College of Surgeons of England.

Among the various works of reference that are usually to be found upon the medical practitioner's desk the roll of graduates of the university or the list of members of the corporation from which he obtained his qualification will figure conspicuously. The only drawback to these excellent publications is that they so soon become out of date. A new edition of the Calendar of the Royal College of Surgeons of England has just been issued by the Council. The list of Fellows now contains 1,589 names, while that of Members numbers 17,126. The number of diplomas issued shows a collective increase of 25 over that of the previous year, and includes 375 Members, 66 Fellows, 124 Licentiates in dental surgery, 41 diplomates in public health, and four diplomates in tropical medicine. With regard to the title of the latter diploma it has been decided to add a reference to the subject of hygiene, and the short title of "D.T.M.Eng." has been altered to "D.T.M. and H.Eng." Alterations in the regulations for the award of the Sir Gilbert Blane medals have also been made, and it is now provided "that one medal be awarded annually to the medical officer who obtains the highest aggregate marks at the examination for promotion to the rank of staff surgeon, now held twice a year in connection with the courses at the medical school of the Royal Naval College, Greenwich, the award to be subject to the approval of the Presidents of the Colleges of Physicians and Surgeons respectively and the Director-General of the Medical Department of the Navy." Previously two medals were conferred once in every two years on two medical officers of the Navy "who in the time required shall have delivered to the proper office journals evincing the most distinguished proofs of skill, diligence, humanity, and learning in the exercise of their professional duties." During the past collegiate year 39 Fellows and 250 Members have died.

Salol in Dentifrices.

The occurrence of an eczematous dermatitis around the mouth consequent upon the use of certain dentifrices, particularly those containing salol, is well known to dermatologists. It is sometimes exceeding difficult to trace the exact source of such an eruption until the tooth-powder or paste in use by the patient has been analysed. Then, again, there is the question of idiosyncrasy, for not every person who uses a salol-containing dentifrice will contract a skin disease therefrom. Our contemporary, the *British and Colonial Druggist*, in referring to the matter, mentions a case in which extensive eczema and "granulation of the neighbouring tissues" occurred after the use of a preparation of this kind, and states that neither phenol nor salicylic acid, the decomposition products of salol, are "likely to produce eczema." If an irritative dermatitis, indistinguishable clinically from ordinary eczema, be known to occur after the application in sensitive subjects of, say, dilute carbolic acid, to the epidermis, there is no reason why such an eruption should not follow upon the lips if a watery solution of salol be allowed to play upon them. Whether the exciting agent be due to an impurity, as has been suggested, or to the salol itself is not definitely known, but at any rate it is wiser not to recommend the use of dentifrices which contain salol or allied substances to patients with sensitive skins, even though the quantity present be apparently insignificant.

PERSONAL.

Dr. Charles E. Fitzgerald has been elected President of the Royal College of Physicians of Ireland.

Dr. Tom Stansfield, M.B., B.S.Lond., has been appointed Assistant School Medical Officer to the Somerset Education Committee.

Sir William Turner, K.C.B., Principal of Edinburgh University, opened last week the new anatomy rooms for women in Surgeons' Hall Edinburgh.

Col. T. D. Collis Barry, I.M.S., has been appointed Physician in charge of the X-ray Department of the *Dreadnought* (Seamen's Hospital Society).

Mr. William Paynter Noall, M.S.Lond., F.R.C.S.Eng., has been appointed Surgeon with charge of Out-patients to the York County Hospital.

Dr. A. K. Chalmers, Medical Officer of Health of Glasgow, has been elected President of the Society of Medical Officers of Health for the ensuing year.

Professor Sir Thomas R. Frazer, M.D., F.R.C.P. Edin., has been appointed Chairman of the recently constituted Clinical Medical Board by the Edinburgh University Court.

Dr. D. A. Reid, late Medical Officer of Health of Tenby, was presented the other day with an illuminated address and a cheque in recognition of his valuable services to the town.

Mr. Balfour S. Nicholson, M.B., M.C.Glas., D.P.H., Assistant Medical Officer of Health and Assistant School Medical Officer for Fife and Kinross, has been appointed Assistant Tuberculosis Officer and Assistant Medical Officer of Health for the same counties.

The Council of the Royal Institute of Public Health announce that they have accepted the offer made to them by Professor William R. Smith, M.D., to present annually a gold medal of the value of £20, "for conspicuous services rendered to the cause of preventive medicine within the British Empire." It is proposed that the first award shall be made in 1914.

Dr. William Russell has been appointed to the Moncrieff-Arnott Chair of Medicine in Edinburgh. Dr. Russell is Senior Physician to the Edinburgh Royal Infirmary, and Dean of the School of Medicine for Women, in which he has taken a deep interest. His career has been a distinguished one, commencing with the gaining of the gold medal for his thesis for the M.D. degree in 1884, followed by the Cullen Prize in 1893, and he has always associated himself in all movements for the general welfare of the profession.

AN ADDRESS

ON

THE VISCERAL COMPLICATIONS MET WITH IN HYSTERECTOMY FOR FIBROIDS AND THE BEST METHODS OF DEALING WITH THEM. (a)

By SIR JOHN BLAND-SUTTON, F.R.C.S.Eng.,

Surgeon to the Middlesex Hospital.

Twenty years ago abdominal hysterectomy for fibroids was performed by clumsy methods and attended by a high mortality. In the Middlesex Hospital, during 1892, the uterus was removed on account of fibroids three times; two of the patients died as a result of the operation, but in 1912 there were 71 abdominal hysterectomies for fibroids in the same hospital, and all the women recovered. A marvellous improvement in twenty years. To-day, hysterectomy for fibroids is a common operation with a mortality varying from 1 to 5 per cent. in the hospitals of London, general and special. I have chosen 1892 for comparison with 1912 because it is the year in which Baer, of Philadelphia, introduced the method now known as subtotal hysterectomy and inaugurated a new era in the surgery of the uterus. A *technique* of the operation varies very little with different surgeons, and I believe that the small mortality attending this operation can be further reduced. During the last 10 years discussion has mainly centred around the subtotal and the total operation. I do not propose to discuss *technique*, but I believe some valuable information can be obtained by a consideration of the visceral complications associated with fibroids. So many of these tumours have been removed that there are many surgeons who can count their hysterectomies in hundreds, and I believe that some useful facts can be collected if they would be willing to relate their experience in regard to the effects of fibroids on the circulatory system, the thyroid gland, the renal organs, and especially in relation to diabetes. These are conditions on the borderland of medicine and surgery. It will also be interesting to learn how surgeons deal with certain visceral lesions which occasionally complicate fibroids such as cancer of the colon, injury of the ureters, gallstones, and cancer of the breast.

Cardiac Lesions.

Fibroids are often present in women suffering from chronic cardiac disease, and it has been maintained by several writers that uterine fibroids cause degenerative change in the muscular tissue of the heart. It is true that many patients with fibroids have valvular lesions, a consequence of rheumatic fever, and, in many women who have been reduced to a condition of profound anæmia by a sub-mucous fibroid, the heart yields a loud murmur on auscultation. I have had careful observations made on the cardiac condition of women with fibroids, and there is nothing which can be described as peculiar to the influence of these tumours. It has been my practice for many years in selecting house surgeons to choose officers who have filled a resident appointment under a physician of repute. All patients with fibroids, before being set down for operation, are the subjects of a careful medical examination. On a dozen occasions I have removed the uterus containing large fibroids although the heart has furnished murmurs, clearly due to valvular lesions, when an examination by a competent physician has shown that compensation has been satisfactory and that an operation would not be attended with unusual risks. Indeed, in some instances the removal of a uterus, big with fibroids, from a patient with valvular disease will relieve an embarrassed heart. For example: A stout woman, æt. 50, with a large ovarian cyst and a fibroid the size of a football, suffered from dyspnœa due to a dilated heart and myocarditis. The anæsthetist would not risk a general anæsthetic, but we felt that if the tumour could be removed great relief would follow. The tumours were removed under an intra-dural injection of novocain. Convalescence was rapid, the cardiac symptoms disappeared, and the patient soon became robust and has since led an active and useful life.

The heart is a very adaptable organ and it is comprehensible, when we consider the size and vascularity of some fibroids, that the extra amount of work thrown upon it would lead to its enlargement. I believe that some cases of sudden death which occur within a few days of hysterectomy for fibroids happen in women the subjects of chronic, but unrecognised, disease of the heart. Some of these deaths are attributed to pulmonary embolism, but no death should be so assigned unless there has been a *post-mortem* examination and the embolus found. On this occasion I do not propose to discuss fatal post-operative pulmonary embolism, except to remind surgeons that recorded statistics indicate its occurrence in 1 per cent. of women who submit to abdominal hysterectomy for fibroids. I have recently published evidence which indicates in no uncertain way that it is often due to the exuberant use of buried sutures for closing the incision in the abdominal wall.

The Thyroid Gland.

From time immemorial it has been known that some mysterious relationship exists between the thyroid gland and the genital organs. No explanation has been found. The brilliant suggestion of Gaskell (in his fascinating account of "The Origin of Vertebrates") that the mammalian thyroid is the representative of the uterine glands of a palæostracan ancestor (of which the scorpion is a type) stimulates but fails to satisfy. To-day the matter is further complicated by the discovery of a relationship between the hypophysis and the genital glands on evidence at which even the most practical surgeon cannot scoff. On three occasions I have removed a uterus containing fibroids from women æt. 30, 33 and 35, who at the time of the operation possessed goitres. I have been surprised on seeing the patients six months after the hysterectomy to notice marked diminution in the size of the goitrous thyroids. In 1908, a spinster, æt. 44, suffered from menorrhagia due to multiple fibroids, but she had exophthalmic goitre and the thyroid was enlarged. It occurred to me that as the removal of the uterus for fibroids causes a goitre to shrink, such a sequel might be expected if hysterectomy was performed on this patient. After careful consideration I removed the uterus with the ovaries and tubes by the subtotal method. The operation was performed at the Middlesex Hospital and lasted twelve minutes. Chloroform was used for the anæsthesia. Before operation the patient's temperature was 99° Fahr. and the pulse rate 130. Twenty hours after the operation her temperature was 102° Fahr. and the pulse rate 140 per minute; but the thyroid gland had markedly decreased in size, and the eyeballs were less prominent. Forty-eight hours after the operation she was in a desperate condition. The temperature was 104° Fahr., pulse rate 180 per minute, and the thyroid gland had further diminished in size. The patient died fifty-six hours after the operation. A *post-mortem* examination was not permitted. This experience confirms the opinion that women with well-marked exophthalmic goitre are bad subjects for any operation.

(a) An address delivered at the opening of a discussion at the Medical Society of London, on Monday last, October 27th.

Diabetes.

The presence of sugar in the urine is, as a rule, a contra-indication to hysterectomy for fibroids. All patients requiring hysterectomy who come under my care have their urine carefully examined for sugar. It is a serious responsibility to operate on a patient whose urine contains sugar, but the risk must be faced in exceptional cases.

A widow, æt. 43, passed sugar in the urine to the extent of 5 grains per ounce. She suffered from menorrhagia, her menstrual periods lasting on an average ten days, the excessive bleeding depending on a large submucous fibroid. The patient wished to re-marry and was deterred from doing so, not by the glycosuria, but the menorrhagia. She wished to have the tumour removed and was willing to face the risks. I performed a subtotal hysterectomy. The operation was followed by a quick and uneventful convalescence; the patient married again and was in good health three years after the operation.

The following case is more instructive: A married woman, æt. 69, had a large uterine fibroid. There was free bleeding from the vagina at frequent but irregular intervals, which led me to suspect that cancer existed in the body of the uterus as well as a fibroid. The patient was diabetic, the urine contained 10 grains of sugar per ounce. I performed subtotal hysterectomy in 1904. The uterus contained a large submucous fibroid and a cancerous mass the size of a tennis ball. The patient recovered; she was alive and well in 1912—eight years after the operation.

I am sure, as a rule, it is a wise thing to abstain from performing hysterectomy on diabetics, especially young women. I have gathered from facts related to me by surgeons that such operations are attended with a high mortality. In some cases hysterectomy has been performed without the surgeon suspecting diabetes until the diuresis and the odour of the patient's breath, or the supervention of coma, led to an examination of the urine. Before leaving the subject of diabetes in relation to hysterectomy there is one aspect of it which is worth consideration. A large amount of evidence has been accumulated which tends to show that there is some interaction between the hypophysis and the genital glands. In acromegalic women menstruation is suppressed and, in some of them, the urine contains sugar. Experimental evidence has also been adduced which is supposed to prove that the hypophysis enlarges temporarily during pregnancy. Marek reported the following observation: A woman, æt. 26, was in the eighth month of pregnancy when she noticed that her gloves and boots became too tight. Her fingers thickened and the rings on them had to be removed with a file. She became sleepy and thirsty; sugar appeared in the urine. Gradually she assumed the coarse skin, thick lips and projection of the lower jaw characteristic of acromegaly. The child survived its birth, and in a few months the signs of acromegaly in the mother disappeared.

A large submucous fibroid produces similar changes in the uterus to those set up by the growth of a fœtus. Glycosuria occurs with sufficient frequency, as a complication of normal pregnancy and of fibroids, to make it conceivable that the uterine changes incidental to the growth of the fibroid may influence the hypophysis and thus be indirectly responsible for the glycosuria. Some years ago it was the fashion to tell a woman who wished to have her uterus removed for fibroids, that after the operation the skin thickens and she would grow fat and coarse. Experience teaches that the reverse is true. Women with large submucous fibroids are more or less in a condition resembling chronic pregnancy. Such patients sometimes become gross and fat and acquire a thick skin like acromegalics, but after a successful hysterectomy these unpleasant conditions disappear as in Marek's patient. We know nothing of the condition of the hypophysis in patients who have had the uterus removed for large fibroids. I hope pathologists who have an opportunity of inquiring into this matter will help us.

The Renal Function.

The close relationship of the uterus, bladder and vesical segments of the ureters leads to many complications when the uterus is occupied by fibroids and the changes which follow in the bladder, ureters and kidneys, if the tumour is of such a size and shape as to cause retention of urine, are well known. The urine of patients with a large cervical fibroid, or a fibroid of the body of the uterus impacted in the pelvis, often contains slight traces of albumen. This is not a contra-indication to operation, and the albumen quickly disappears after the tumour has been removed. Some years ago systematic examinations were made of urine drawn from patients under my care within the first thirty-six hours after pelvic operations, such as ovariotomy and hysterectomy, and it was found in nearly every case to contain the colon bacillus. I am unable to offer any explanation of its presence. This is worth mention; obstetric physicians are unable to make anything better than a guess as to the mode by which the urinary system is invaded by the colon bacillus in that troublesome condition known as pyelonephritis of pregnancy. Chronic urinary troubles of septic origin do occur in association with uterine fibroids, but I have never seen anything comparable to the acute suffering which is sometimes seen in pregnant women when the colon bacillus invades the kidneys and ureters. One of the most serious accidents that happens in the course of hysterectomy is an injury to both ureters. This is serious enough when the accident is detected in the course of the operation, but it is more unfortunate if it remain undetected until the nurse draws attention to the emptiness of the patient's bladder. No reliable estimate of the frequency with which ureters are injured in the course of hysterectomy for fibroids is forthcoming. British surgical literature contains few references, but it is only necessary to turn over the pages of the *Zentralblatt für Gynækologie* to be satisfied that they are often cut. At the present time, when a ureter is injured in the performance of abdominal hysterectomy, the surgeon endeavours to anastomose the cut ends. Failing in this he implants the proximal end in the bladder wall. Urologists do not approve of this; they insist that when a ureter is engrafted into the bladder it becomes sclerosed by chronic ureteritis, which narrows and finally obliterates its lumen. This sclerotic obliteration does not happen in every case. Lockyer, in removing a fibroid which burrowed between the layers of the broad ligament, wounded the bladder and divided the right ureter. He repaired the hole in the bladder and removed the kidney. During the twenty-four hours following the operation the bladder remained empty. Lockyer re-opened the abdomen and found the left ureter cut. He engrafted its proximal end into the bladder through the wound which had been already sutured. Convalescence was retarded by a urinary fistula, but Lockyer's resourcefulness was rewarded, for the woman recovered and was in good health three years later.

Many years ago I was present at a hysterectomy when a gynæcologist cut three inches out of a ureter mistaking it for an adhesion. He tied the proximal end of the cut ureter with a silk thread. The patient, a middle-aged woman, recovered without an untoward sign and remained well. This led me to take a special interest in this method of dealing with a cut ureter. In 1909 I expressed the opinion that it is possible, and probable, that a ureter has been tied in the course of a hysterectomy and the patient has recovered without anyone having a suspicion that such an accident had happened.

Dr. J. D. Barney collected and classified the reports of sixty-two cases in which the ureter was injured. Of these, sixteen were bilateral and forty-six unilateral. The majority of the accidents occurred in the course of hysterectomy. He notes that sudden occlusion of the ureter by a ligature often produces no symptoms: sometimes it is followed by pain and tenderness in the kidney which subside spontaneously. In some instances the accident is followed by hydronephrosis, and he reiterates the opinion, which I have already expressed, that there is strong probability that a ureter is often unconsciously tied in the course of hysterectomy. If gynæcologists would tell us how they treat cut ureters this discussion would be justified, for, if it is only necessary to tie the proximal end of the cut ureter, the way out of an embarrassing accident would be greatly simplified.

FIBROIDS AND CANCER OF THE COLON.

Fortunately uterine fibroids rarely contract adhesions to the intestines unless the uterus and Fallopian tubes have been the seat of infection, gonorrhœal or puerperal. It is unusual for the surgeon to be hampered with bowel complications when he undertakes hysterectomy for fibroids, but he may have to deal with cancer of the sigmoid flexure of the colon, or the upper part of the rectum. It has happened to me on several occasions in the course of removing the uterus for fibroids to find cancer of the sigmoid flexure. After completing the hysterectomy I excised the cancer in the colon and joined the cut ends of the bowel by an end-to-end anastomosis. In a woman blanched from profuse and oft-repeated uterine bleeding, due to a cervical fibroid, I removed the uterus and its neck (total hysterectomy), and, in adjusting the intestines preliminary to closing the incision, detected a cancerous focus in the sigmoid flexure of the colon. The patient had sustained a serious operation, and in her weak condition I did not think it wise to excise the bowel. She made an excellent recovery, and was kept under observation. Two months later I excised the growth, and she recovered easily from the operation, and was alive and in good health two years later.

The growth of cancer in the colon is often slow and insidious, and there is a massive form of colic cancer which, during its symptomless stages, is indistinguishable, especially when the mass lies in contact with the uterus, from a subserous fibroid. The diagnostic signs are sometimes especially deceptive if there should at the same time be a few small hard fibroids in the uterus. Sometimes I have undertaken an abdominal operation hoping to find an impacted fibroid, but have found a hard cancerous growth in the sigmoid flexure impacted in the pelvis, and the operation has ended in colotomy. In happier cases I have started on the operation with strong suspicions that the patient had a malignant mass in the bowel, but found an impacted fibroid. It is a most evil combination when a fibroid of moderate size occupies the uterus and a massive cancer of the sigmoid flexure adheres to it. I am not alone in such experience; some of my gynæcological colleagues have occasionally stumbled on a cancerous pelvic colon in mistake for a fibroid, and have assigned the patients to their surgical associate for the operation of resection.

UTERINE FIBROIDS AND GALLSTONES.

Gallstones are common in women; so are fibroids, and it sometimes happens that women come under observation with the two conditions giving so much trouble that the surgeon is puzzled to know which should be dealt with first. On three occasions I have removed a calculous gall-bladder in the course of hysterectomy for fibroids. In each instance the uterus was so large as to require for its removal an incision reaching nearly to the ensiform cartilage. In these circumstances the removal of the gall-bladder was a simple operation. In one instance the inflamed gall-bladder adhered to a large subserous fibroid. In two other instances of this combination I removed the gall-bladder six months after the hysterectomy. The only definite rule which I think can be laid down in the matter is this: If a woman deeply jaundiced in consequence of a stone impacted in the common duct also suffers from a uterine fibroid, which so troubles her as to make it desirable to remove the uterus, I should prefer to remove the stone from the common duct first, because it is well known that cholæmia predisposes to hæmorrhage. Hysterectomy in a woman with persistent jaundice is an operation which would place her life in the gravest peril from post-operative bleeding.

The pelvic complications of uterine fibroids, such as ovarian cysts, pregnancy, pyosalpinx, inflamed appendix, and the like, are so common and so well understood that they have no place in this discussion. We are anxious to obtain the experience of those who perform hysterectomy for fibroids, especially in relation to such complicating conditions as heart disease, goitre, diabetes, renal disease, and cancer of the intestine. Fatal accidents in *technique* (such as hæmorrhage and shock) occur occasionally like railway collisions and deaths from lightning, but post-operative deaths from heart disease, pulmonary embolism and injuries to the ureters will be fewer if we profit by the experience of those who have faced these difficulties. In this way the risks of hysterectomy for fibroids, though small, will be reduced, and, small as they are, I am sure we have not reached the irreducible minimum.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Dr. Froelich, Professor Agrege in the Faculty of Medicine, Nancy. Subject: "Is it Necessary to Operate in Spina Bifida?*

ORIGINAL PAPERS.

THE INTESTINE AS A PATHWAY OF INFECTION TO THE TUBERCLE BACILLUS, WITH SPECIAL REFERENCE TO THE PART PLAYED BY ENTERITIS. (*a*)

By LEONARD FINDLAY, D.Sc., M.D.

Assistant Professor to the Practice of Medicine, University of Glasgow.

In view of the great divergence of opinion regarding the question as to whether the healthy intestinal mucosa is pervious to the tubercle bacillus, and because it is one of great practical importance, the author carried out a series of experiments with improved *technique*. The *causa morbi*, in the form of culture of the bacilli, was suspended in oil and placed in a gelatine capsule which was slipped just within the nozzle of a stomach tube and ejected by forcing a stream ot water through it after its passage into the stomach. It had been previously found that the introduction of an emulsion of the bacilli per the stomach-tube almost invariably gave rise to insufflation tuberculosis, and any abdominal operation for its introduction direct into the stomach or intestine allowed infection of the peritoneum.

In consequence of the frequency with which catarrhal conditions of the intestine are present in childhood, the period of life in which the tubercle bacillus is believed to enter most frequently by the intestine, the question was studied in normal rabbits and in rabbits which had recently suffered from intestinal catarrh. This was induced by means of an infusion of senna and gamboge. Both the human and bovine types of the tubercle bacillus were experimented with. In a series of 12 healthy animals, fed as above described with bovine tubercle bacilli, and killed at periods varying from four to ten days later, living tubercle bacilli were demonstrated by animal experiment in the mesenteric glands from two of the cases. In another series of five rabbits which had previously suffered from diarrhœa and were killed six to eight days after the ingestion of the organisms, living bacilli were demonstrated in the mesenteric glands in one case. In neither series were living bacilli found in the lungs.

In healthy rabbits fed on living tubercle bacilli and allowed to live for prolonged periods tubercular lesions were discovered in all those that survived at least 50 days. The appendix and adenoid patch at the ileo-cæcal valve were invariably the seat of nodules, the mesenteric glands less frequently, and the lungs only when the experiments were at least of 70 days' duration. In a similar series of long period experiments in which the rabbits had previously suffered from enteritis, induced by gamboge and senna, tubercular lesions developed as early as 19 days, and were present in all that survived at least 30 days. The lesions were similarly distributed, but were much more extensive and more frequently generalised. A diarrhœal animal presented lesions at 20 days as extensive as those found in a healthy animal after a duration of 60 days.

The great majority of healthy rabbits fed on tubercular sputum and on emulsions of human tubercle bacilli and allowed to live for long periods afterwards did not develop tuberculosis. In 16 animals so treated tubercle bacilli were detected on one occasion in films of the mesenteric glands. In two healthy rabbits, to which 20 mgrs. of a young culture of the human type of tubercle bacillus were administered by gelatine capsule, and which were allowed to live for periods of 96 and 117 days, tubercular lesions were detected. In the 96-day experiment very slight but definite lesions were present at the ileo-cæcal valve, and in the 117-day experiment a suspicious-looking nodule about the size of a pinpoint was present also at the ileo-cæcal valve; but microscopic examination revealed the presence of tubercle bacilli only in the first case. In both, however, very definite tubercular foci were situated in the lungs. Of five rabbits which had previously suffered from diarrhœa, four, killed at periods varying from 37 to 63 days after the ingestion, presented tubercular lesions. The animal which remained free from tuberculosis had recovered about eight days from the symptoms of enteritis, whereas in the other animals the inoculation took place only two days after the cessation of the diarrhœa. The lesions when present were situated in the appendix and adenoid patch at the ileo-cæcal valve, and in the mesenteric glands. As one could understand, the lesions with the human type of the bacillus were much less extensive, and, in marked contrast to the experiments with the bovine type of organism (where the intestinal mischief was invariably the most extensive), the lungs in the healthy rabbits and the mesenteric glands in the diarrhœal animals were more severely affected than the bowel. Indeed, in one of the non-diarrhœal animals, the lungs alone were definitely diseased and it would thus seem possible for the primary intestinal lesion to heal and an apparently primary glandular or pulmonary tuberculosis to result.

The conclusions drawn from the experiments were :—1. Healthy rabbits can be infected by the ingestion of large amounts of bovine tubercle bacilli. 2. The bacilli can pass through the apparently intact intestinal mucous membrane and reach the mesenteric glands within a period of six days; this, however, does not frequently occur. 3. When infection occurs, the intestine is invariably the seat of lesions, and thus tuberculosis of any organ, other than the intestine, is always a secondary infection when the bacilli have entered by the intestinal route. 4. Catarrh of the intestine does not favour the passage of the tubercle bacillus through the wall, but allows of a more constant and also of an earlier and more widespread infection of the bowel, and in this way facilitates dissemination. 5. Healthy rabbits can be infected by the ingestion of large amounts of the human tubercle bacillus. 6. Rabbits just recovered from intestinal catarrh develop tuberculosis more easily and much sooner after the ingestion of human tubercle bacilli. 7. With the human type of organism, a local lesion, though always present, may be slight in comparison with the deceased foci in the mesenteric glands and lungs. 8. In digestion experiments with the human type of the bacillus, it would seem possible for the local lesion to heal and all trace of the portal ot entry to be lost. 9. It would seem that the best means of combating the spread of bovine infection in childhood, so long as the removal of

---

(*a*) Abstract of Paper read before the Glasgow Medico-Chirurgical Society, October 17th, 1913. (See page 480.)

the source is not tackled, is the avoidance of everything likely to cause intestinal catarrh, and the use of sterilised milk.

PLEUROGENIC REFLEXES IN THE LIMBS.

By Dr. HANS FINSTERER,
Privat Dozent in Surgery, and Assistant, Universitats Klinik, Vienna.

[Specially Reported for this Journal.]

In the Congress of Surgery held last year, von Saar read a communication (*Archiv fur Klinische Chirurgie*, xcix., 243) in which he discussed the occurrence and significance of sensory and motor derangements of the extremities, supervening upon lesions of the pleura in cases in which the original injury did not in any way involve the affected limbs. His attention had been directed to this rare clinical phenomenon, by meeting with a case in which reflex paresis of the left upper extremity developed after a penetrating wound of the left pleural cavity. This led him to examine the literature of the subject, and the comparison of the data of eight cases which had been previously reported; also to further research on the subject by a series of experiments on animals with the object of being able to throw some light on the clinical and pathological significance of the phenomenon. Regarding the relative infrequency of this clinical accident, on the one hand, and the importance of its recognition for diagnosis and indication of appropriate treatment—medicinal and mechanical—on the other, I may be allowed to place before the reader a brief account of a case which recently appeared in Professor Hochenegg's Klinik, and was carefully observed by me.

An official, æt. 53, was brought into the accident department of the Hochenegg Klinik, on the evening of June 22nd, 1912. A short time previously he had attempted suicide by shooting himself in the left mammary region. On being questioned in detail, the patient stated that he had felt sharp neuralgic pains in both lower extremities immediately after the attempted suicidal wound; also, that cramp-like spasmodic contractions and twitchings appeared at intervals, and lasted for about thirty seconds; soon after the lapse of which the legs could be moved voluntarily again without any pain or apparent deficiency of normal power.

On admission the patient displayed the Stokes syndrome; startling pallor of features; pulse 118. The breathing was very frequent. In the seventh intercostal space, a finger's breadth outside the mammillary line, was to be seen the opening left by the shot-wound; its margins were blackened by the powder. On the left side of the thorax there was abnormal dulness over a hand's-breadth area; no blood-stained expectoration. The abdominal walls did not present any abnormal tension; there was no abnormal area of dulness discoverable; the neighbourhood of the first and second lumbar vertebræ was markedly sensitive to pressure. During the process of percussion of the thorax, the patient complained of acute pains in both the lower extremities; especially in the thighs, and on the left side more than on the right. Also, it was noticed that on taking a deep inspiration, the more acute pains located in the thighs travelled down into the legs; and, on this account, the patient carefully avoided taking a deep inspiration.

On examination with the Röntgen rays, the projectile was located close to the first lumbar vertebra; on the left side of the latter, and on a plane somewhat posterior to the body—which had not been injured by the missile.

The treatment at first consisted of absolute rest in bed, with administration of morphine. There was no substantial improvement of the hæmothorax. The pains in the legs gradually subsided, but could still be vividly elicited after the lapse of a week by vigorous percussion of the thorax, or by deep inspiratory movements. There was no apparent defect of motor power or motion, either active or passive. With regard to the psychic condition of the patient, which had been markedly querulous, there seemed to be no traces of any erratic disposition observable at the close of an interval of ten days. At the time of discharge, the paræsthesia had almost completelydisappeared. And on inquiry into the subsequent history of the patient, it was ascertained that no permanent sequelæ of the original injury had remained.

The principal feature of importance associated with a knowledge of pleurogenic reflexes of the extremities is that of their diagnostic significance. The patient whose case is described above had been sent on to us by the Rescue Society, with the apparently correct diagnosis: "Gunshot wound of the spinal cord." At first sight this diagnosis seemed to be borne out very closely by the facts of the existence of pains in both lower extremities, and the periodic recurrence of muscular cramps. By the interesting communication of von Saar my attention was, for the first time, directed to the rare clinical phenomenon of pleurogenic reflexes of the extremities; and, in the case of which I have just detailed the symptoms, the recollection suggested special enlightenment regarding the significance of the complication—on account of the decided absence of pronounced motor lesions, and, even more especially, by the fact that the pains in the limbs were always elicited and emphasised by percussion and by deep inspiration; which, having regard to the nature and history of the original injury (a shot fired with the right hand into the left side of the thorax) would have, at first sight, appeared very unlikely to find a satisfactory explanation in associated cause and effect. Then the Rontgen-ray investigation of the position of the projectile which distinctly located it on the left side of the first lumbar vertebra, with which it was not in immediate contact, revealed a condition which absolutely excluded any attempt at explanation by mechanical injury of the spinal cord.

The question how the appearance and development of these reflexes can be accounted for can hardly be said to be satisfactorily answerable at the present time; inasmuch as we still possess but a very limited number of recorded clinical observations, and a few reports of experimental researches. We have but some apparently plausible grounds for the belief that the medium of conduction in those very rare reflexes is furnished in some cases by branches of the vagus (Cordier), and in others by twigs of the intercostals which lie beneath the parietal pleura. That anæmia of the spinal cord, produced by reflex contraction of the spinal vessels resulting from peripheral stimulation (Brown-Sequard), can hardly be taken as an intelligible cause of the cramps and pains in our cases, is fairly deducible from the fact that they may be made to appear so promptly by percussion of the thorax.

Had the pains developed, in our own case, in the left lower extremity exclusively, the position of the projectile, near the left side of the first lumbar vertebra, would have at once suggested a direct nerve lesion as the probable cause. But such could not be suggested by the symptoms actually observed, for the bilateral development of which concussion of the lumbar section of the spinal cord with consecutive capillary hæmorrhages would be requisite, according to this view—which was most unlikely, from the limited degree of traumatic injury. Thus there remains, in way of explanation of the origin of the symptoms in our case, only the view that it was the result of reflex stimulation, commencing in the pleura and possibly, as might be concluded from Cordier's experimental researches on animals, switched therefrom to the nearest conducting branches of the vagus.

Quite recently (*Deutsche Zeitschrift fur Chirurgie*, cxix., 1912) Zesas has given an exhaustive and lucid account, based on his own observation and the critical analysis of 53 cases collected from all the sources of the literature of the subject, of the various reported accidents associated with operative lesions of the pleura (as in tapping for empyema, etc.), which in rare instances have been followed by development of reflex spasms in various parts of the body—leading in special circumstances to a dangerous series of sequelæ, and even to a fatal issue. Those cases present a very considerable degree of similarity to the rare examples of reflex phenomena which appear after gun-shot injury of the pleura.

It should be borne in mind that a knowledge of the occasional occurrence of such pleurogenic reflexes is of great importance from the therapeutic view-point. This fact is forcibly illustrated by the history of our own case, in which adoption of the view that the symptoms which developed were due to organic lesion of the spinal cord would necessarily have led to very active therapeutic procedure; while, with the accurate knowledge of the facts which we were able to obtain, a purely symptomatic treatment, in which the administration of morphine was one of the principal factors, proved sufficient to lead to a successful issue. Zesas also ascribes a great degree of curative efficacy to the employment of this therapeutic agent in the class of cases of which he has so carefully collated the literature; indeed, he not only attributes to it the power to allay the pains and spasms which have already developed, but also relies upon it for prevention of such accidents occurring after puncture of the pleura, when judiciously administered in time as a prophylactic.

THE VARYING DEGREES IN THE MALIGNANCY OF EPITHELIOMA.

By F. T. PAUL, D.Sc., Ch.M., F.R.C.S.

The earliest histological research into the mysteries of cancer was a primitive form of cytology. It was useless to clinicians. We learnt nothing of practical value from it. Of late years improved *technique* and more perfect instruments have enabled capable researchers in this branch of study to give us much information of great scientific interest and value regarding the nature and character of cancer cells; but up to the present all the knowledge derived from histological research which has been of real practical use has come from the study of the time-honoured section. Cytology is an adjunct to minute anatomy. It does not supersede it, for there are just as many varieties of cancer cell as there are of tissue cell.

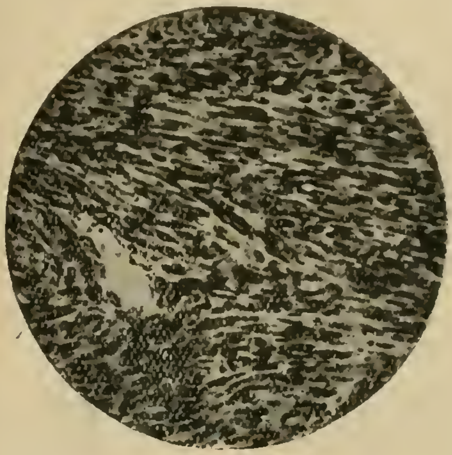


Fig. 1.

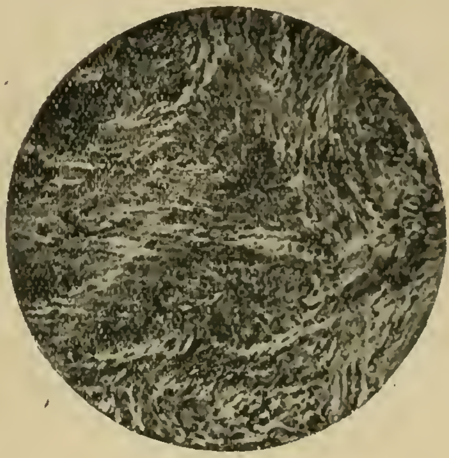


Fig. 2.

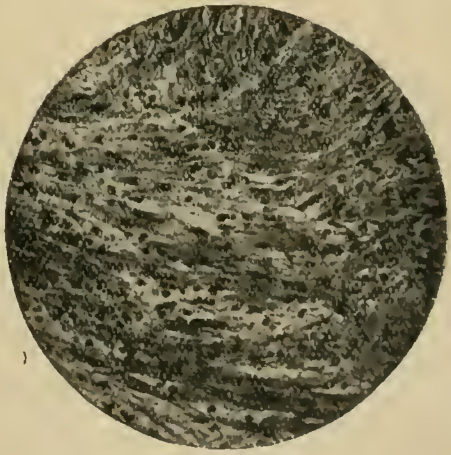


Fig. 3.

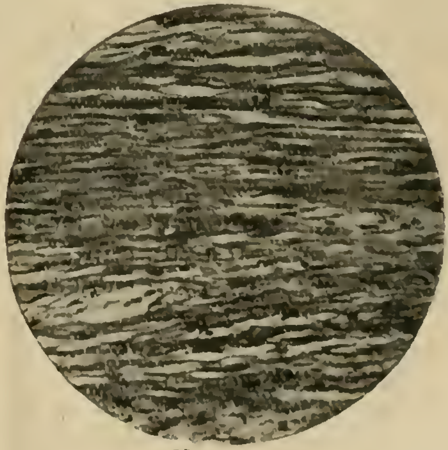


Fig. 4.

Spindle-celled tumours, innocent and malignant.

Modern methods give us clearer and more definite pictures of the minute anatomy of tumours, and with increasing experience we interpret them better, and so obtain more guidance for prognosis and treatment.

Between tumours which are innocent and those which are intensely malignant there are many intervening stages ; but we cannot give a definite name to each grade because the path of evolution follows a different line in the different types of tissue. Thus, in the fibrous connective-tissue tumours there are, between fibroma and soft spindle-celled sarcoma, growths of every degree between innocence and malignancy. Many of these are classed under the name of sarcoma, and as some are very malignant, whilst others are hardly so at all, more definite classification is needed to avoid confusion. Experience has taught us that if the nuclei are large, irregular in size, and show marked mitotic changes, and the cell wall is not defined, the growth is very malignant, involving a wide removal and a bad prognosis. If the nuclei are more regular and elongated, and the cell wall clearly defined—like, for example, the spindle cells in a myeloid epulis—the case is more hopeful. If the cell wall is continued into fibrillar branches the tumour is on the border line of innocence. If the nuclei are linear and the cells have completely fibrillated, the tumour is perfectly innocent. (Figs. 1 to 4.)

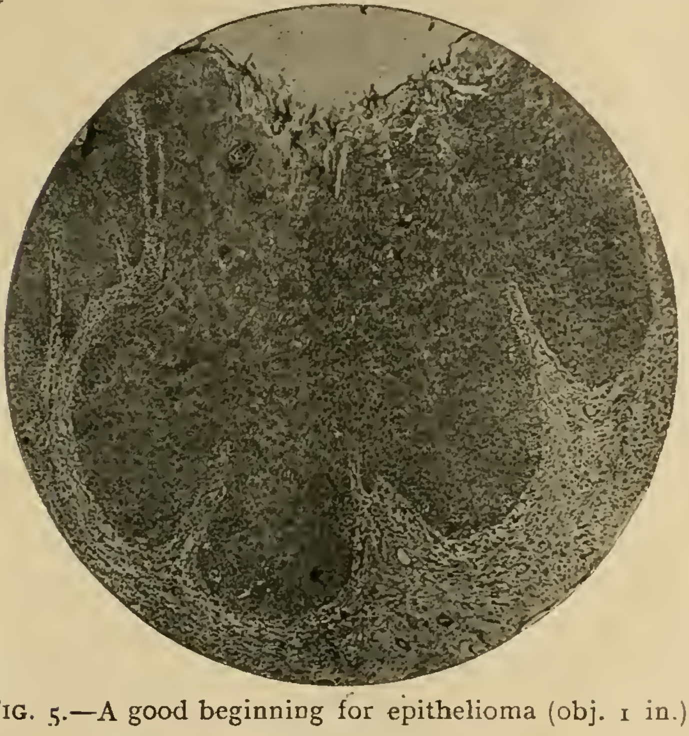


FIG. 5.—A good beginning for epithelioma (obj. 1 in.).

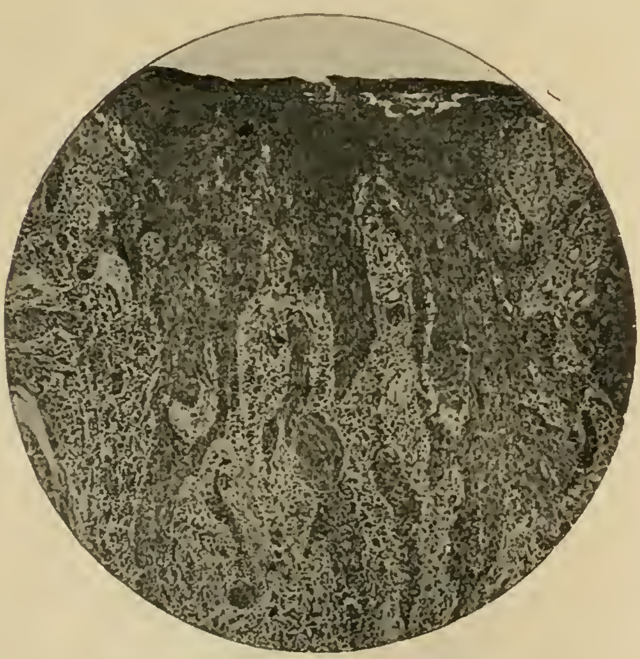


FIG. 6.—A bad beginning for epithelioma (obj. 1 in.).

Squamous epithelial tumours are subject to somewhat similar variations. These are not as clearly marked as in the case of spindle-celled connective-tissue growths, but one is able to point to many features which are sufficiently constant to prove helpful.

Apart from the histological appearances, which will be dealt with presently, there are certain preliminary points which should always be taken into consideration. The first is, *to get the case early*. This eclipses every other detail, for I find that of late years the patients operated on at an early stage have almost invariably been cured, even although the patient may have been young and the growth of malignant type. The second is, that *warty growths are better than ulcerating growths*. The more malignant a growth is the sooner it breaks down and ulcerates. A cauliflower type of epithelioma may attain considerable dimensions and still be completely cured by a clean removal. I have had many examples in proof of this on the body as well as in the mouth and larynx. The third is, that *epithelioma originating in scars, embryonic rests, and sebaceous cysts is usually under the average in malignancy*. Such growths are often chronic in type and remain localised for a long

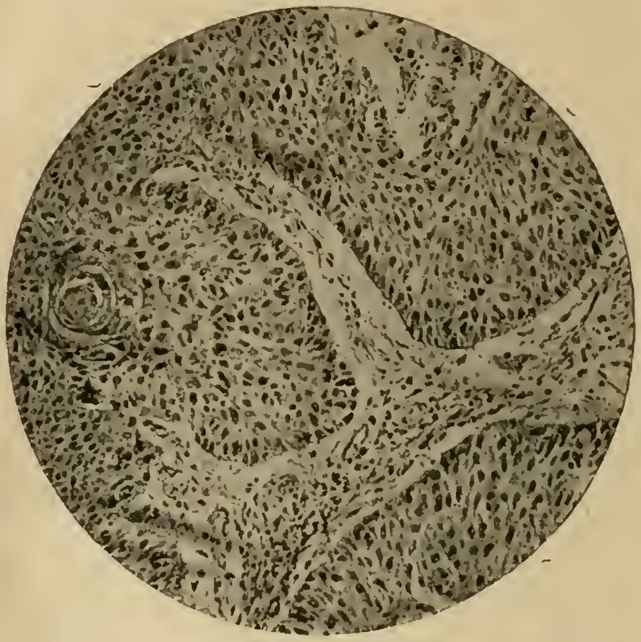


FIG. 7.—A mildly malignant epithelioma of the papillomatous type (obj. $\frac{1}{4}$ in.).

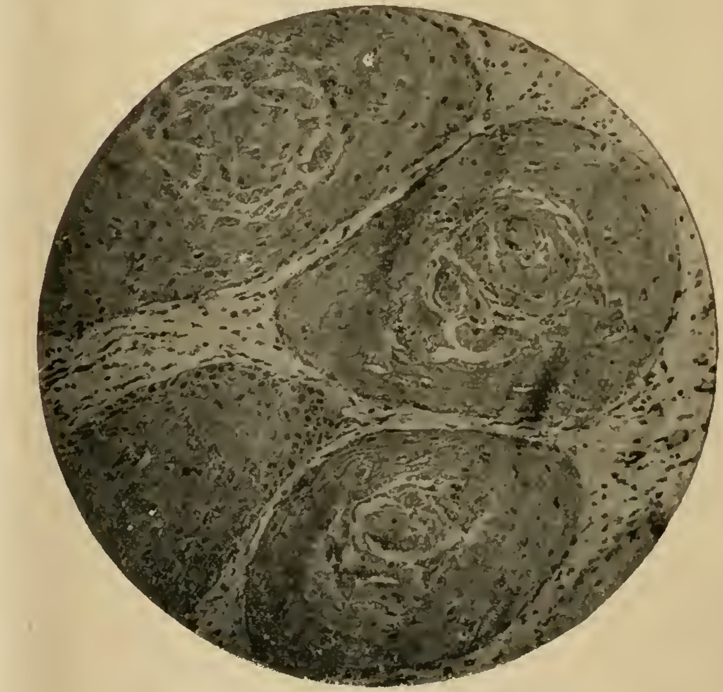


FIG. 8.—A chronic epithelioma (obj. $\frac{1}{4}$ in.).

time, though ultimately a change for the worse may be relied upon. The fourth is, that *epithelioma commencing in a source of chronic irritation is usually very malignant*—such irritation as a dental ulcer, or especially a superficial syphilitic glossitis. The more marked the irritation, the more rapidly will the tumour grow, and the more infiltrating will its nature be.

Regarding the histological appearances, the following are the points to be noted :—

(1) *The commencement.*—When the case is seen on at an early stage, good and bad starts may be observed. The best is a localised chronic warty tumour of the type shown in Fig. 5. The downgrowths should consist of good broad cylinders of epithelium, and the basal irritation should be clearly defined, not spreading far into the underlying tissues. The worst is a widespread downgrowth of fine trabeculæ of epithelium over an ill-defined area of chronically irritated tissue as in Fig. 6. The former never infects the glands in this early stage, and complete local removal is permanent cure. The latter is the type met with in the syphilitic tongue, and secondary distribution may take place at any time.

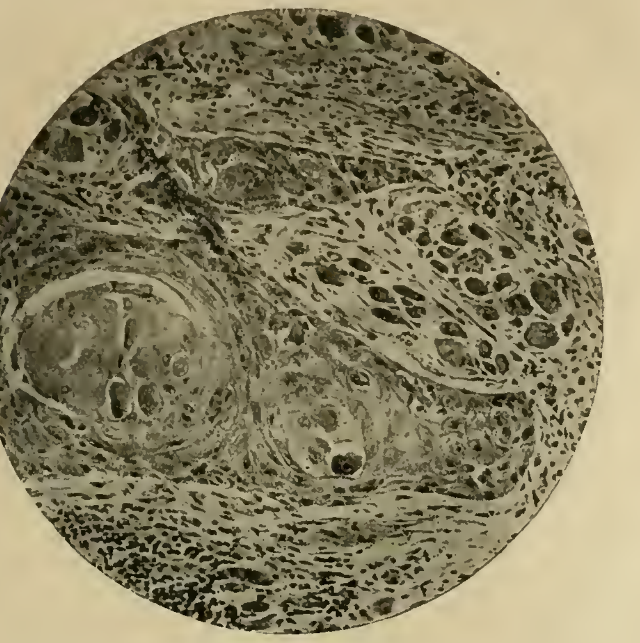


Fig. 9.—A very malignant epithelioma of the ulcerating and infiltrating type (obj. $\frac{1}{4}$ in.).

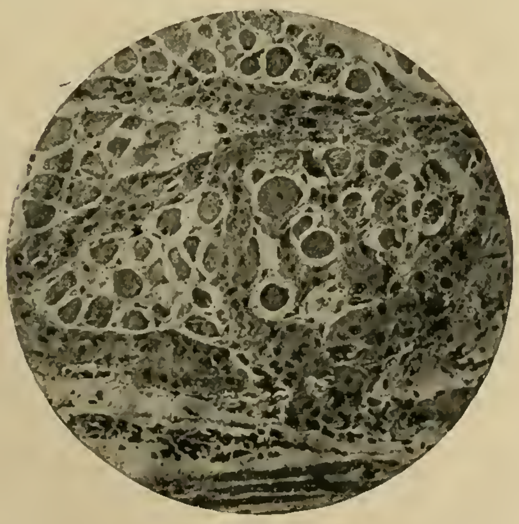


Fig. 10.—A bad lymphatic infection amongst the muscle fibres of the tongue (obj. $\frac{1}{4}$ in.).

(2) *The cell-type.*—One of the best is that there should be large trabeculæ of small cells of uniform type, and with only a slight tendency to the formation of "nest-cells" (Fig. 7). This variety of growth is usually met with in the warty kind of epithelioma, which, though infiltrating, is definitely localised. Such growths have afforded very good operation cures in mouth, tongue, and larynx cases. Another good cell-type is when the epithelium trabeculæ consist of clear-looking, equal-sized cells with smallish nuclei, and the intervening connective tissue is small in amount, fibrous in character, and shows little or no leucocytosis (Fig. 8). This is the appearance met with in chronic forms of epithelioma, like those which may attain a large size in old burn scars without secondary infection. A further favourable type, though not so favourable as the foregoing, is one in which there are large horny nest-cells surrounded by a narrow layer of growing epithelium. The more this character predominates throughout an ordinary epitheliomatous tumour, the more likely it is to be fairly localised, and the better is the patient's prospect after a thorough operation.

The bad cell-types show irregular groups of cells, many of which are small. The individual cells and their nuclei vary much in size, some usually being strikingly large. Nest-cells are always in evidence. The intervening connective tissue is swollen and shows marked leucocytosis. The growth is ill defined, remnants of the normal muscle or other tissue being visible amongst the groups of cancer cells (Fig. 9).

(3) *Definite limitation at the base of the growth.*—This is most important. A bad type, so long as it is definitely limited gives the surgeon a chance of complete local removal, though he may fail subsequently owing to a too wide infection of the lymphatic glands.

(4) *Lymphatic infection.*—The worst feature is to find tumour cells in the lymphatic vessels and spaces outside the area occupied by the growth (Fig. 10). Such cases as these recur locally as well as in the neighbouring lymph glands, and rarely offer any chance for a permanent cure. Early fixation and marked pain and tenderness are usually features of this type of infection.

Every surgeon of experience has witnessed brilliant cures following operations of a limited nature ; and also rapid recurrence and death in other cases, though every resource of modern surgery has been most thoroughly and conscientiously utilised. A consideration of the foregoing details helps to explain such apparent anomalies. If the information is sometimes only available when it is too late to influence the treatment, it is still valuable for forecasting the future, and in time one learns to anticipate the microscope, so that one feels almost sure by the history, appearance, mobility, tenderness, etc., of the growth what type it will prove to be, and how one should plan the attack to be made upon it.

THE SUPERVISION OF THE HEALTH OF CHILDREN BETWEEN INFANCY AND SCHOOL AGE. (*a*)

Report by W. W. JAMES, F.R.C.S., L.D.S.,
London.

The importance attached to the condition of the oral cavity in its relationship to the general health is associated with a notable development of medicine in recent years, namely, the recognition of regions in the body from which secondary infective processes or toxæmias may arise. A most valuable comparison can be made between these regions, and important

---

(*a*) Paper read before the Section of Stomatology, International Congress of Medicine, August, 1913.

as many are, the mouth is probably of chief significance.

The importance of the state of the oral cavity has long been known; for generations the doctor has looked at the tongue, but he should have looked further and examined the teeth. The diminished glandular activity of fever is well observed in the mouth, and in part, perhaps, accounts for the examination of the tongue; but the condition of the mouth is chiefly dependent upon the state of the teeth.

That pathological changes are more frequent in the mouth than in any other part of the body will hardly be denied, and that these changes are chiefly dependent upon the teeth and the tissues supporting them must be allowed, as the lesions otherwise occurring in the oral cavity do not differ markedly from those of other parts.

It is a fact of some significance that the Stomatological Section has been chosen to take part in a discussion upon the supervision of the health of children at this International Congress.

The influence of the mouth upon the general health is dependent upon two main factors, the efficiency of the teeth for mastication and their freedom from pathological lesions; the latter being of far greater importance than the former, although it is true one is dependent upon the other. Ill effects which result from an unclean mouth are due in part to its position at the portal of the alimentary tract, the food swallowed besides not being masticated is contaminated by micro-organisms or their toxic products, and also to direct infection of remote parts through the blood or lymph vascular system, either by micro-organisms themselves or by their toxic products, which have been produced in the tissues supporting the teeth.

The great difficulty of establishing the relationship of a lesion in a remote part with the mouth condition is such that at present our knowledge is based almost entirely upon clinical experience. The condition which has come to be known as " an unclean mouth " or " oral sepsis " is dependent either upon one or both of the two chief pathological lesions of the dental tissues, dental caries and pyorrhœa alveolaris. The supervision of health, therefore, regarded from the point of view of the stomatologist, must comprise the prevention of conditions favourable to these dental lesions or if established their treatment in order that they may not become extensive or dangerous to the patient.

During the period under discussion, between infancy and school age, most important changes are taking place in the mouth and neighbouring parts. Our considerations must comprise certain points in the normal development of the parts; and the deviations and pathological changes which have been established during infancy, which may arise during this period and which may be prevented in the future. It is most necessary also to consider the means which can be adopted to maintain the mouth in a healthy state both by the patient and the dental surgeon.

The normal development of the teeth and jaws is so closely related to the neighbouring parts that for a complete study it would be necessary to describe the progressive changes which occur in the bones of the face. For our present purpose it is sufficient to consider certain points in normal development which may undergo deviation and produce conditions favourable to the more serious pathological dental lesions.

At the time of completion of the temporary dentition the teeth should be evenly arranged in well-developed arches, their crowns should be free of the gingival tissues with the root implanted in marked alveolar processes. The occlusion of the teeth resembles that of the permanent series, except that the posterior surfaces of the second temporary molars of the maxillæ and of the mandible are almost in the same plane, the maxillary tooth being only very slightly posterior to that of the mandible.

The temporo-mandibular joint is most imperfect when compared with the adult joint, the surface for the reception of the condyle being almost flat. The state of this joint is most significant, for its development would seem to depend upon the future relationship of the maxillary and mandibular teeth. An anatomical consideration of the movements which occur in the temporo-mandibular joint should really include the articulation of the teeth surfaces of the opposing jaws, for the movements of the joint are dependent, in many positions, upon the articulation of the teeth.

The relationship between the development of the nasal cavities and the jaws and dental arches is of the utmost importance, on account of the great frequency with which maldevelopment of the one is associated with maldevelopment of the other. The deviation in the development of the jaws, from clinical experience, would appear to be secondary to the state of the nasal cavity; but some observers hold the converse is true, that the mouth condition is primarily at fault. Our present knowledge of the primary causes is so limited that we can speak from little more than clinical experience.

The succession of changes in the process of development of the jaws during the period under discussion comprises growths of the bones and eruption of the permanent teeth with loss of those of the temporary series.

The development of the bones is such that the additional space required for the permanent teeth is supplied, growth takes place in several directions, but the exact changes are not definitely known. It seems possible that the presence of the teeth may have a special influence; interstitial growth has been assumed to take place in the mandible, although it is most difficult to conceive.

Prior to and during the period of eruption of the permanent teeth the development of the jaws can be observed. The dental arches increase in size, the incisor teeth of the temporary dentition become spaced; the jaws in the region of the temporary molars are wider, as has been shown by measurement in a few cases; and the jaws show an increase in length in the antero-posterior direction in order to allow the first permanent molar to come into position. A change which, in the opinion of the writer, is of great importance, consists of an alteration in the relationship of the mandible to the maxillæ. Previous to the eruption of the first permanent molars the mandible appears to develop in such a manner that the incisors no longer occlude posteriorly to those of the maxillæ, but assume a more or less edge-to-edge occlusion. The marked attrition of the temporary incisors is explained by this change, and is an indication whether it is occurring or not. The normal occlusion of the first permanent molars is permitted by this change; but if it does not take place the mandibular teeth will probably assume a post-normal relationship, as the second temporary molars will still have their posterior surfaces in almost the same vertical plane. The establishment of this view is difficult, as the movements of the mandible are so free in a child, a very wide range being possible. Models show the edge-to-edge occlusion is probable, but also that other positions are possible. It is sufficient to examine the mouths of children to be sure that this edge-to-edge occlusion occurs. It is my opinion that a case calls for careful consideration if the attrition marks on the temporary incisors are not definitely seen at the age of five and a half years.

Normally the teeth should stand upon well-formed alveolar processes; too little attention has been directed to imperfect development in a vertical direction, probably because the treatment of the condition appears almost hopeless. This condition is only too common, and is associated with recognised imperfections in the development of the jaws.

Some of the causes of imperfect development of the dental arches are known, but our present knowledge cannot be regarded as other than vague. That nasal obstruction is a most potent factor is certain; that loss of temporary teeth at an early age is a cause of much importance has long been recognised, although in some cases ill effects do not result; of the deformities caused in infancy, those produced by habits constitute a larger group than has been thought; the general development of the child may be impaired by ill-health, by insufficient or poor food which may have a local effect as in the case of rickets. Local affections also may exercise a marked influence.

The interest which is now being taken in the deviations from normal development of the temporary dentition should be productive of a far greater knowledge than we now possess of the normal changes in the jaws. Until quite recently dental surgeons did not attach much importance to the stages prior to the eruption of the permanent teeth.

With regard to the eruption of the permanent teeth it is impossible to enter into a discussion of the various views held. The changes are of the greatest importance, and need be referred to only so far as they influence the prevention of dental lesions. Most observers will allow that the temporary teeth are lost by a process of absorption, and that the tissues supporting these teeth are, for the most part, also removed. If a tooth be examined prior to the date of eruption, by cutting sections, the crown is found to be merely covered by the overlying tissues, but the root from the neck downwards is very differently related, the tissues being closely attached. It is difficult to conceive "eruption" of the tooth without a corresponding change in these attached tissues.

The views of the writer, that eruption is brought about by the growth of the tooth and its supporting tissues, which causes advancement, and by denudation of the crown, at first by the opening out of the overlying tissues along the remains of the tooth band, and later by the actual removal of these tissues, may not be generally accepted, but that the final process is one of absorption will hardly be doubted.

The final stage in which the loose tissue about the crown of the tooth is removed, leaving the gum closely attached to the neck and protected by the projecting enamel, is so important that it cannot be passed over, for in those cases in which it is incomplete a predisposition to pathological changes of the utmost importance has been established.

The completion of eruption appears to be brought about by the removal of the soft tissues as the result of stimulation by friction when food is eaten, and the advantage of a type of food which is capable of doing this is obvious.

The effect of pituitary and thyroid secretions upon the growth of the jaws and the eruption of the teeth are insufficiently known to be of clinical value, but it may be mentioned that benefit is said to have followed the use of thyroid extract in cases of nasal obstruction.

Much stress has been laid from time to time upon inherited characteristics; how far these play a part in producing conditions favourable to dental lesions is uncertain. That the face of the offspring often so closely resembles that of the parent should be sufficient to prove that their jaws are similar; but that the same dental pathological lesions will occur does not follow. Future investigations from this aspect will certainly be of interest, and may prove to be of great value.

Normal development should result in the arrangement of the teeth in perfect arches with correct occlusion, and probably no one will disagree that when this occurs dental lesions are less likely to supervene. The dental surgeon should endeavour, therefore, to achieve this end, whilst normal function by the patient should be encouraged for the same purpose.

The commonest deviations from normal development, where the cause can be recognised as having occurred during infancy, are due to:

Mechanical Distortion.
Caries of the Teeth and their Loss.
Nasal Obstruction.
Constitutional Disturbances.

Mechanical Distortions primarily affect the anterior part of the jaws and are the result of constant and repeated pressure upon a firm substance placed between the teeth. The object is usually described as being sucked, and the deformities resulting are spoken of as due to "sucking a teat," "thumb-sucking," "finger-sucking," "tongue-sucking," and although sucking may be the reason of their introduction into the mouth, it is really the pressure of closing the jaws which causes the deformity.

Teats, whether upon bottles or as dummies, may be used without ill effects; but the deformities at times are considerable and of sufficient frequency to condemn their use, apart from their dirty condition, which is so usual. In cases of deformity from this cause the child has been allowed to sleep with the teat in the mouth. If a child be watched in which deformity has occurred, it will be seen at intervals to vigorously and rapidly close its jaws upon the teat, and when the mouth is examined a displacement of the tissues is seen which accurately fit against the teat when placed in position. The deformity involves the maxillæ more than the mandible; the maxillary central, and occasionally the lateral incisors, are displaced forwards and upwards, but what is more important is the similar displacement of the alveolar process carrying the teeth. The mandibular teeth may show little displacement; they may be slightly depressed, tipped inwards, but rarely outwards.

In nearly all these cases distortion of the alveolus is present, and the position of the permanent teeth will almost certainly be affected.

The method of prevention in these cases is obvious, although at times very difficult to carry out. If the cause be removed the lips will normally exercise sufficient force to correct the deformity, but it may be necessary to introduce an appliance such as is described later for the prevention of mouth-breathing. In the case of tongue-sucking a vulcanite palate plate with a flange projecting downwards behind the front teeth and worn at night will usually be effective.

The deformities, although variable, are generally characteristic of the different factors which cause them. The teat deformity is seen at the earliest age; it occurs in the middle line, involves the incisors, the central maxillary incisors chiefly; the teeth are often carious, and extensively so in those children for whom the teat has had honey or sugar put upon it, as is frequently done.

The deformity due to thumb sucking is usually more marked on one side of the arch than the other, and involves more teeth than in the case of the teat. Tongue-sucking may be seen occasionally in the molar region as well as anteriorly; the deformity often affects the canines as well as the incisors; when the teeth are occluded, a space forming a narrow slit is seen between the maxillary and mandibular teeth; the cause may be difficult to establish if the tongue is sucked only at night.

Dental Carries in the temporary dentition is so common that it is more usual to find it present in one or more teeth than a complete absence of it.

The fact of chief importance is that caries most frequently commences in the fissures of the molars. It is also commonly found in the incisors; a dirty teat is the cause in many cases, whilst in others mouth-breathing may be present. Maldevelopment of the teeth, in children with a history of constitutional disturbance such as rickets, is a common cause, and often the predisposing factor in those cases where all the teeth in the mouth are affected. It has been thought that hypoplasia of the temporary teeth is rare; but those who have examined the mouths of a great number of children will have recognised imperfections in development of the teeth which are only too common.

The secondary affections associated with caries in the temporary teeth are of such importance to the subject under discussion that they cannot be passed over.

The first ill-effect occurs when the function is impaired, the teeth are painful, and in consequence cease to be used; particles of food remain upon the teeth and caries commences in others besides those which are already affected.

Normal development is interfered with not only by the infection of the tissues, but by the loss of the temporary teeth. Where the crown of a tooth has been lost as a complete tooth has been removed the neighbouring teeth are forced together by the tension of the lips and cheeks, flattening of the arch results, leading to a diminution in size, which may have a marked effect upon the future position of the permanent teeth.

The presence of a root which is infected prevents normal absorption of the temporary tooth from taking place. This is probably due to the toxic products acting upon the tissues which should bring about the absorption. The presence of the septic root may cause marked deviation of rotation of the permanent successor.

Dental caries also leads to impaired mastication, which diminishes the stimulus to development of the jaws and permanent teeth.

The effect is very important upon the whole alimentary tract, for food is not masticated and is contaminated with micro-organisms and their products.

Local inflammatory conditions of the mucous membranes of the mouth are present and sometimes severe; cases of necrosis of the bone may result, and not infrequently necrosis of permanent teeth occurs, usually of the premolars. It is quite common to find hypoplasia of a permanent tooth due to the inflammation associated with a temporary tooth.

The uncleanliness of the mouth which results from dental caries leads to infection of other parts. In my own experience several cases of chronic otitis media have been arrested completely by rendering the mouth clean; the nasal obstruction had been treated, but the chronic suppuration in the ear continued, in spite of local treatment, until the mouth was rendered clean. The operation in cases of adenoids should not be undertaken, with our present knowledge, until after the mouth has been treated.

The association of infection of the mouth with enlargement of the lymphatic glands in the neck is well known. The experience in my cases may be of interest, as careful records were kept over a long period and a very large number of children examined.

The lymphatic glands particularly associated with mouth lesions are the upper cervical glands beneath the upper part of the sternomastoid, the glands and nodules closely connected with the connective tissue of the parotid and submaxillary salivary glands, and the submental glands.

The cervical glands are best examined by standing behind the patient, whose head is bent forwards and towards the side being examined. The other glands are best felt by a finger being introduced into the mouth to depress the floor, whilst the fingers of the other hand are used beneath the mandible externally.

In all children the glands are palpable, but when healthy can only just be felt, and are freely movable. When irritated, probably by toxic products rather than directly infected, they are felt to be enlarged, soft, and only slightly tender if at all, and usually movable. If definitely infected they will be tender, more or less fixed, and perhaps softening at one point. After removal of the teeth and cleansing of the mouth the glands can still be felt, but they have contracted and are felt as small, firm nodules.

The possibility of glands irritated in this manner being infected by the tubercle bacillus is of much importance.

Prevention of dental caries will be dealt with later in my paper.

The treatment of caries in the temporary teeth consists of filling cavities and the extraction of teeth in which the pulp is involved. Some modification is perhaps necessary to both of these statements, but taken as general principles they are, in the opinion of the writer, quite sound.

If the child is difficult to manage and many teeth are carious, extraction is indicated. The second temporary molars should be saved, if possible—the loss of these teeth has more effect than any others upon the future development; they may be removed if the first permanent molars are in occlusion or when the caries involves that part of the tooth which is next to the permanent molar. The loss of the anterior teeth leads to diminution of the corresponding part of the arch of the permanent series, but the correction of this condition is usually easy when the occlusion of the first permanent molars is normal.

Under all circumstances the mouth must be rendered clean, and if removal of the temporary teeth be the only way to achieve this end they must go; correction of ill effects, if necessary, can be undertaken later.

Nasal Obstruction and Mouth-breathing are powerful factors in causing maldevelopment of the jaws. Different views are held as to whether the mouth-breathing or the nasal obstruction is the primary fault—the majority of observers incline to the latter. This subject is being discussed at one of the meetings of the Stomatological Section, but some reference to it here is necessary.

(*To be concluded.*)

OPERATING THEATRES.

BOLINGBROKE HOSPITAL.

A Case of Cut Throat.—Mr. Swainson operated on a case of cut throat. The history of the case was as follows:—The patient, a man, æt. 75, cut his throat with a razor. The wound extended from the left sterno-mastoid muscle to the right at the level of the upper edge of the thyroid cartilage of the larynx, and divided the thyro-hyoid muscles, cervical fascia, and anterior wall of the pharynx. The epiglottis was completely cut from its attachment to the thyroid cartilage, and the common carotid arteries were exposed but uncut. The patient had lost much blood. the case was temporarily treated in the out-patient department as follows:—The bleeding points were ligatured; a stitch was passed through the upper border of the larynx and of the skin of the neck to prevent the larynx from slipping down into the wound. The patient was then admitted to hospital and seen by Mr. Swainson, who performed the following operation:—A preliminary tracheotomy was first done, and a tracheotomy tube stitched into the opening. The original wound was next dealt with. It was first gently mopped out with some biniodide lotion, care being taken to avoid the larynx. The epiglottis was sutured with catgut to the thyroid cartilage, and the lateral walls of the pharynx were similarly sewn up. Silkworm-gut sutures were then passed through the skin, cervical fascia and the muscles, and the wound closed. Drainage tubes were inserted in each end of the wound, which was then cleansed with biniodide in spirit, 1-500, and dressed.

Mr. Swainson said that the first thing to deal with in cases of cut throat was hæmorrhage. There was also danger of asphyxia from blocking of the larynx. In this case it was found that the patient breathed better when the larynx was drawn up by seizing the thyroid cartilage in the middle line with a vulsellum and making traction in an upward direction. It was advisable, he thought, to sew up the wound in layers with catgut sutures so as to restore as far as possible the normal condition of the parts. As the wound was necessarily septic owing to its communication with the pharynx, it was also necessary to provide free drainage, as had been done in the present instance. When the larynx was freely opened, as in this case, it was advisable to perform tracheotomy. The after treatment would consist in keeping the parts absolutely at rest with constant supervision of the patient and very careful feeding. Unfortunately these patients frequently succumb to pneumonia, usually septic in origin. As sequelæ fistulæ sometimes formed, there was occasionally stenosis of the larynx and trachea and sometimes aphonia from injury to the recurrent laryngeal nerve.

On returning to the ward the patient was propped up in bed and continuous saline given per rectum. Shortly after his return to ward the metal tracheotomy tube slipped out of the trachea, and had to be replaced by a piece of rubber tubing about three inches in length and split at upper end in order to make two flaps, which were stitched to the skin at the sides of the tracheotomy wound. The cause of slipping out of the metal tube was the depth of the trachea at the tracheotomy wound from the skin surface; this permitted only the end of the metal tube to lodge in the trachea. No fluids or food were administered by the mouth, but a nutrient enema of

Glucose, oz. i.,
Egg albumin, oz. i.,
Brandy, oz. ½,
Saline, ad oz. vi.,

was given. The patient unfortunately succumbed to pneumonia on the following day.

General Septic Peritonitis Complicated by Pregnancy.—The same surgeon operated on a woman, æt. 35, who had been admitted with the following history:—The patient was 5½ months pregnant, and about 60 hours previous to admission had been suddenly seized with acute abdominal pain and vomiting. The vomiting was continuous, while the pain, which had first been felt in the right side, had later become general, with acute exacerbations resembling labour pains. On admission she had a temperature of 100.8°, the pulse being 120, and the respirations 32. The abdomen was distended, rigid and tender. The tongue was coated and dry. An enema resulted in a large constipated motion, with passage of much flatus, which to some extent relieved the distension of abdomen.

Mr. Swainson saw the patient one hour after admission, and decided upon immediate operation. Under anæsthetic of open ether, a preliminary vaginal examination revealed an os dilated to admit the tips of two fingers, and through which intact membranes and active fœtal movements could be felt. A median incision about 6 in. in length was made from just below the umbilicus to the symphysis. On opening the peritoneum free pus was met in the peritoneal cavity, and a large gangrenous perforated appendix in the iliac fossa. The peritoneum was inflamed and coated with flaky lymph. The appendix was removed and the peritoneal cavity swabbed out and then flushed with saline. Two large drainage tubes were inserted into both sides of the pouch of Douglas, and the abdomen closed by through-and-through sutures of thick Pagenstecker thread.

Mr. Swainson remarked that the patient was clearly suffering from peritonitis as shown by the rigid, tender and distended abdomen. The temperature of 101° also pointed to this, and the pulse was 120 and the breathing was thoracic. There had been a history of sudden pain in the iliac fossa, which rather suggested the onset of appendicitis, and the patient was also pregnant. As the cause of the peritonitis was uncertain, it was decided to open the abdomen in the middle line. A free opening in this situation gives the most ready access to all parts of the abdomen, and is afterwards most easily and quickly sewn up by through-and-through sutures. Speed is most important in these cases; if possible the operation should not take more than half an hour. It is advisable to mop up the pus with large dry swabs and rolls of gauze. If there is a great deal of general extravasation flushing with saline solution is useful. If possible, the cause of the inflammation—in this case gangrenous appendix—should be removed if it can be done speedily. Free drainage must then be provided by means of rubber tubes and sometimes gauze, and then the patient should be quickly returned to bed and placed in the so-called Fowler position, with the head and shoulders raised, and saline infusion per rectum should be given continuously. By this means toxines are diluted and got rid of. Later on a solution of glucose per rectum would help to nourish the patient, whose normal alimentary functions were in abeyance.

The patient was put back to bed with the head and trunk raised, and continuous rectal saline commenced. Six hours after operation the patient aborted. The fœtus, which was delivered from a breech presentation, breathed for an hour. After the abortion the patient was given pituitary extract, 1 c.c., intramuscularly, and continuous rectal saline was recommenced. The saline was stopped at the end of 36 hours, by which time she had received four pints and a half.

The wound discharged copiously for ten days, and the thread sutures which closed the abdominal wound became infected. The stitches were painted with iodine and also fomented, and later a dressing of emulsion of iodoform and glycerine was applied. One pelvic drainage tube was removed on the third day after operation, and the other was replaced by plugging gauze on the tenth day. The through-and-through sutures were removed on the fourteenth day and a firm scar resulted. The wound was painted with tinc. iodine daily.

Three weeks after operation the patient's temperature and pulse were normal, and on the 32nd day she was allowed up on a couch. The temperature had never reached 102°.

TRANSACTIONS OF SOCIETIES.

HARVEIAN SOCIETY OF LONDON.

Clinical Meeting held at Paddington Green Children's Hospital on Thursday, October 16th, 1913.

Dr. Leonard Guthrie in the Chair.

CASES SHOWN.

The President showed several cases of congenital hereditary nystagmus and head rolling.

Dr. G. A. Sutherland, a case of cœliac disease in a child. A case of a child with auricular fibrillation of which some interesting heart tracings. Also a child three years after the removal of the left kidney for sarcoma by Mr. Burghard. For two years there was an apparent cure, now recurrence had taken place.

Mr. Gauntlett showed a case of ulnar paralysis following the separation of the lower epiphysis of the humerus. The nerve had been freed from the callus by which it was surrounded. A case of ischæmic paralysis after a fracture of the olecranon.

Dr. Hay, a case of bacilluria.

Dr. Haldin Davies, an extremely severe case of ichthyosis in a young man.

Mr. Leonard Ball showed a series of dental cases, ranging from six to ten years.

Mr. Duncan Fitzwilliams showed a case of which a lipoma had been removed from under the parietal pleura, also a fibrolipoma from under the deltoid; it had been attached to the capsule of the shoulder joint. Also a case of tumour in the upper part of the abdomen in a child, the nature of which was uncertain.

Dr. Perkins had arranged an exhibition of interesting microscopic and pathological specimens.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

Meeting held October 17th, 1913.

Dr. John M. Cowan, in giving a lantern demonstration on

AURICULAR FLUTTER,

reviewed briefly the literature on the subject. McWilliam, in 1887, showed that the application of an electrical stimulus to the auricle produced a premature systole starting at the point of stimulation. Faradisation of the auricles "sets the auricles into a rapid flutter, the rapidity of which largely depends upon the excitability of the auricle tissue and the strength of current employed. The movements are regular; they seem to consist of a series of contractions originating in the stimulated area, and thence spreading over the rest of the tissue. The movement does not show any sign of inco-ordination: it looks like a rapid series of contraction waves passing over the auricular walls," and thus differed from auricular fibrillation, in which the auricular contractions were inco-ordinate, much more frequent (500-600) and irregular. In 1905, Gibson and Ritchie reported, with polygraph tracings, a case of full heart block, in which, with auricular contractions numbering 246-300, the ventricular beats numbered 30 per minute; and in 1906 a similar case. Morrison, Hertz, and Goodhart also published similar tracings. In 1910 Jolly and Ritchie commenced investigations with the electrical polygraph, and, independently of others, isolated auricular fibrillation. They also examined the 1905 case of rapid auricular action and found that the auricular waves were regular, numbering about 300, and diphasic. They suggested that this might be the same as McWilliam's auricular flutter. Further observations by Ritchie, Lewis and others seemed to have established the identity of a new rhythm, and one that is not at all uncommon. Thirty cases have been published, and Dr. Cowan had found eight cases in his own collection with polygraph tracings, and many more in which its occurrence seemed probable. In illustration of the condition, a series of polygraph tracings was demonstrated.

Dr. Leonard Findlay read a paper, illustrated by lantern slides, on

THE INTESTINE AS A PATHWAY OF INFECTION TO THE TUBERCLE BACILLUS,

with special reference to the part played by enteritis, a full abstract of which will be found under the heading "Original Papers," page 471.

LIVERPOOL MEDICAL INSTITUTION.

The First Ordinary Meeting of the 75th Session was held on Thursday, October 16th, 1913.

The President, Mr. Robert Jones, in the Chair.

The President read an inaugural address on the views held by the late Mr. H. O. Thomas, more especially on

INTESTINAL OBSTRUCTION.

The works of the late Mr. Thomas, with the exception of his splints, were too little known, partly owing to his writings having been published privately. Mr. Thomas, writing in 1884, recognised the futility of the commonly advocated methods of treating intestinal obstruction—namely, by purgation, enemata and milk diet. He recognised that where a mechanical condition was the obstruction, no medical treatment could avail anything, but that in cases of functional obstruction it was possible by resting the bowel, by rendering the contents above the block fluid and non-irritating, and by relieving pain, to give a favourable termination to many cases. The treatment he advised was first to relieve pain by hypodermic injections of morphia, to allay thirst by the administration of water, and to withhold all food that would add to the contents of the intestine. Cases so treated might go on for from 40 to 50 days. Resolution occurred by the patient passing first flatus, perhaps some small scybala, then a large pultaceous motion followed by watery evacuations. Mr. Thomas was particularly anxious for his cases at this stage, enforcing complete rest and allowing food to be given only very gradually and of such a kind as to produce as little intestinal residue as possible. Mr. Jones alluded to the views of Ochsener, of Chicago, who had recommended lavage starvation, while he withheld cathartics.

Mr. Rushton Parker proposed a vote of thanks to the President, and was seconded by Mr. F. T. Paul.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 25th, 1913.

Treatment of Flatulence.

Flatulence, says Prof. Robin, is one of the most frequent symptoms of every form of dyspepsia, especially in that due to fermentation.

At the beginning of the process of digestion flatulence is purely gastric, later it becomes intestinal and manifests itself by quantities of wind and tympanites. It is characterised by frequent eructations and bubbling sounds synchronous with the respiration; the neighbouring organs are more or less compressed, provoking in many cases dyspnœa, oppression, palpitations and cardiac intermittence. When the gases cannot find a way of escape meteorism sets in, to the great danger of a weak heart.

Herschell believes that the cardiac compression may provoke sudden death, and those persons known to suffer from disease of the heart, who are found dead in bed in the morning, succumb during the night to syncope produced by flatulence.

Flatulence has a double origin : Gas developed during gastric fermentation; air swallowed with the food or otherwise (aerophagia).

The gases engendered by fermentation are but little abundant, but the presence in the stomach of air swallowed with the food increases the amount of gas developed during fermentation. These gases are composed of azote, oxygen, carbonic acid, but also hydrogen and, in certain cases, sulphuretted hydrogen. Contrary to what is observed in pure aerophagia, these gases are more or less odorous.

The treatment of flatulence due to gastric fermentation is that of fermentation. Small doses of fluoride of ammonium :—

Fluoride of ammonium 6 grs.
Water 10 ozs.

a tablespoonful in the middle of each repast (2).

In the case of lactic fermentation the double iodide of bismuth—erythrol—should be preferred,

Erythrol $\frac{1}{2}$ gr.
Prepared chalk 5 grs.

for one cachet; taken after meals.

The nature of the food ingested should receive attention; every article to be excluded that has tendency to ferment: pork, game, shell-fish, cheeses, grease, sauces, etc. It is also necessary to aid rapid evacuation of the stomach by giving bitters to stimulate the muscular coat of the organ—

Tincture of nux vomica 3 drs.
Hippo wine 1 dr.
Essence of aniseed 1 drop,

ten drops in a little water after meals.

Absorbents, and particularly poplar charcoal, are good adjuvants.

In the second variety of flatulence, that due to aerophagia, the ætiological characters are quite different. The digestive troubles are provoked, not by a dyspeptic condition complicated with gastric fermentations, but by the deglutition of quantities of air—enormous quantities in some cases. Fits of eructation appear at any moment; they are independent of the ingestion of food, come on spontaneously or under the slightest exciting cause, cease suddenly, are not painful. In most cases, aerophagia represents a simple neuropathic manifestation.

The treatment of this form is that of the cause—neuropathy. In slight cases, hydrotherapy, ether spray over the epigastrium, massage may be useful, but in aggravated cases these means are inadequate.

The patient should be instructed as to the nature of his affection, and advised to control the movements of deglutition. A good way of avoiding aerophagia outside of meals consists in keeping the mouth open as long as possible by means of a piece of cork or india-rubber placed between the teeth, thus involuntary deglutition is prevented.

Where the gas escapes with difficulty, tympanism and meteorism set in with all their complications. Here Seltzer water may be tried, ether may be given, while gentle massage is made over the epigastrium.

Salpingo-Ovaritis.

Salpingo-ovaritis is, needless to say, due to multiple causes: complications following confinement, spontaneous or provoked abortion, obstetrical or surgical operations, menstrual disorders, gonorrhœa, metritis, etc.

The impossibility of curing salpingo-ovaritis outside surgical interference was generally admitted; removal of the diseased appendages was the rule adopted by most medical men some years ago. However, a reaction has taken place in favour of preserving the organs to the patient when possible. As prophylactic treatment the chances of infection have been reduced to a minimum by the generalised use of antiseptics in confinements and all infections of the genital tract.

In presence of a case of acute or chronic salpingo-ovaritis, the medical attendant has in hand several active means which will frequently render operative measures unnecessary, if intelligently employed.

In acute cases: (*a*) Absolute rest in bed and in the horizonal position. (*b*) Warm applications over the abdomen, hot poultices moistened with

Belladonna oil, 3 oz.
Ext. of opium,
Ext. of belladonna, aa 1 dr.
Ext. of hyoscyamus,
Chloroform, 5 dr.

(*c*) Against fever, six or eight leeches loco dolenti and one of the following cachets—

Bichloride of quinine, 8 gr.
Powdered digitalis, 1 gr.

(*d*) Warm injections (113° F.) twice a day, with—

Boric acid, 2 teaspoonfuls.
Laudanum 50 drops.

For two quarts of water.

(*e*) Laxatives.

Chronic cases of salpingo-ovaritis are treated by warm rectal injections, plugs of cotton wool steeped in

Glycerine, 3 oz.
Tannin, 3 oz.

and applied to the cervix once or twice a day. Iodide of potassium is given internally—

Iodide of potassium, 1 dr.
Arseniate of soda, 1 gr.
Water, 10 oz.

Two tablespoonfuls a day after meals

The mineral water cure is frequently very efficient in removing exudations and adherences and relieving pain. Prof. Robin classes these waters according to their degree of activity—Biarritz, Salies de Béarn, Rheinfelden, Salins du Jura, Néris, Luxeuil, Plombieres.

GERMANY.

Berlin, Oct. 25th, 1913.

At the Aerztlicher Verein Stettin Hr. Kalb related a case of operation for obstinate constipation. He first pointed out the value of Roentgen illumination after giving bismuth by the mouth followed by injecting it into the bowel. The case (patient shown) was that of a man, æt. 34, who for years had suffered from the most obstinate constipation. The motions were passed at the most every three days, and that following the administration of very powerful purgatives, with enemata following. The illumination showed atony of the transverse colon, but more especially of the descending part. Laparotomy was performed with transverse section of the fasciæ after the method of Pfannenstiel. The atonic portions were excluded from the main intestinal tract by wide anastomoses between the commencing portion of the transverse colon and the sigmoid flexure. Recovery was uninterrupted. After the operation the bowels were opened twice daily without any medicines of any kind and without any change in the diet. X-ray examination after the operation showed that nearly all the contents of the bowels were passing through the short cut made by the operation.

Hr. Haeckel showed an infant for whom he had performed

Extirpation of a Suppurating Kidney.

The child, two months old, had had a panaritium, in connection with which necrosis of a phalanx had occurred. During the course of this suppuration had taken place in the left kidney, this had been incised Excessive discharge of pus took place from the opening and persisted for a long time. Two months later, when the infant was four months old, the incision was lengthened forwards—without the previous administration of an anæsthetic—in an oblique direction. Multiple abscesses were found in the fat around the kidney. The kidney was then after incision of the capsule shelled out and removed. In the upper surface was a large abscess which communicated with the outside, and which had been the cause of the other abscesses round the kidney. The wound was closed partly by suture and partly by tampons. The little thing stood the operation well, and now three months after it was quite well with the exception of a small secreting orifice. Staphylo and streptococci were found in the suppurating tissues, but no tubercle bacilli.

Hr. Freund, Jr., who had attended the child earlier, said the kidney process was a metastatic one, as was proved by the panaritium and the presence of staphylococci in the urine.

Hr. Kalb also related what he considered to be a

Unique Case of Peptic Ulcer of the Duodenum.

It was that of a infant only six weeks old who suffered from perforation of the bowel and purulent peritonitis. He was of opinion that the very early age of the patient rendered the case unique as far as regarded literature. Since the year 1904 there has been in existence in Berlin a society which has for its aim the watchful care of all cases of disease of the lungs, cancer and the victims of alcoholic excesses. The society sends visitors, nurses, or medical men who will undertake the duties to watch over and advise in these cases. In the case of drunkards, for instance, it is infinitely better for the patient that his steps should be watched over daily or even hourly if necessary, than that public-houses should be shut or even that publicans should be fined, however gratifying that may be. Interference with the sale of alcohol does not fall within the scope of the activities of the society. If a patient passes from one part of the city to another he is not lost sight of, but is simply passed on to an affiliated branch in that district. In the case of drunkards the patient's family is usually aroused to take an active interest in trying to save the patient against himself, and this has been followed by an encouraging amount of success. During the year 1912, 1,277 cases were taken in hand, in 646 of them the patient's family was roused to a sense of responsibility with prompt amelioration of the conditions. In 122 cases the drunkard was successfully kept within the bounds of sobriety and at work. No medicines are given, and there is no interference in the medicinal treatment of the cases.

At the Aerztlicher Verein Frankfort, Hr. Sasse reported two cases of

Total Extirpation of the Stomach.

The second case was one of special interest. It was that of a man, æt. 76, for whom a diagnosis of cancer of the stomach had been made. Partial resection was determined on. At the operation it was found that the carcinoma was very extensive and superficial, and that it was adherent to the adjoining parts. In order to mobilise and set free the stomach it was found necessary to remove a triangular piece from the mesocolon and also a portion of the pancreas. As the disease reached almost to the cardiac orifice of the stomach the operator determined on total extirpation. The stomach was therefore removed *in toto*, the duodenal opening closed and an upper loop of small intestine sewn into the œsophagus. The patient several weeks after the operation felt quite free from any intestinal troubles. (Skiagrams of the case were shown).

AUSTRIA.

Vienna, Oct. 25th. 1913.

The Use of Papaverin in the Differential Diagnosis of Stenosis and Spasm of the Pylorus.

Papaverin, which is an absolutely innoxious pharmacological and therapeutic agent, has been employed by Drs. Holzknecht and Sgalitzer, of Vienna, as an auxiliary to the Röntgen rays in the differential diagnosis of pyloro-spasmus and pyloro-stenosis. For this purpose it is administered by the mouth, in form of the hydrochlorate, in doses of 0.05 to 0.07 gramme. In case of a normally healthy stomach, it procrastinates the expulsion of the contents for a fourth to a third of the normal period, as tested by the standard period of Rieder's meal-time. By its influence in producing relaxation of muscular contractile vigour it increases the retardation of effective motility produced by pyloric spasm; and, in cases of organic obstruction, it increases the motile procrastination which results from pyloric stenosis by its lowering effect on the tonus of the muscular fibres of the coats of the stomach. The total result is that papaverin produces a retardation, of practically similar extent, of gastric motile activity in both pyloro-spasmus and pylorostenosis, and lasting for a corresponding period of time. Its therapeutic employment is, accordingly, indicated in pyloro-spasmus and in spastic obstipation, especially in combination with atropine.

Serum-therapy in the Toxicoses of Pregnancy.

Dr. Wolff has obtained conspicuously successful results in treatment of the pruritus and dermatoses of pregnancy by injections of serum—not of another gravid female, but of a healthy woman—taken at the close of an interval of 14 days after delivery. This therapeutic effect goes to prove that the serum of the post-partum patient in the early days after delivery must still continue to retain ferments which tend to disintegrate the molecules of the albuminous constituents of pathogenic organisms.

The Production and Course of Existence of Anti-bodies.

A communication which has just been published by Dr. Lüdke is devoted to demonstration of the fact that the complete periodic course of production of anti-bodies is definable in two anti-body types—agglutinin and hæmolysin. The three phases of the oscillation-curve of the existence of the anti-body—latency, growth, and disintegration—can be defined in all properly investigated cases. The duration of the period of latency or incubation depends on the method of application and special variety of antigen, its quality of virulence, and the previous condition of the animal experimented on. And it was shown by further investigation on the same lines, and comparison of results obtained with the data supplied by clinical observation, and pathological investigation of the results of the effects of the disease and of inoculation on the human organism, in way of modification of its tissues and fluids, that the period of latency noted in the course of laboratory experiments on animals corresponded, at all points, and in every aspect, with the incubation period in men who were the subjects of infection. In the course of convalescence there was noticeable an abbreviation of the period of incubation, and a higher elevation of the titration value of the anti-body. Dr. Lüdke demonstrates the form of the anti-body curves in numerous cases of experiment carried out on the lower animals, also those observed in cases of infected human beings. After discussion of the normal course and production of anti-bodies, the author traces the history of the formation and development of anti-stuffs under pathological conditions in anæmic, icteric and nephritic animals. In every one of these cases, the various individual phases of the formation of the anti-body repeated themselves—even in those in which the lesions were of the most severe type, the process of anti-body formation always retained its sovereign power of survival; the effective intensity of the resulting formation, which expressed itself in the titration value, alone appearing to undergo depression in such cases.

The Poisonous Miana Bug (Argas Persicus).

Lehmann has published an interesting communication on this recent addition to our armamentarium of entomological toxicology, of which he recently exhibited some examples to some of the scientific societies. It belongs to the tick group and is found in Persia. Natives do not seem to notice any effects of its punctures, but foreigners feel sharp pain at the time, and develop symptoms of illness afterwards, which may even end in death after the course of a few days of suffering. The symptoms are mainly gastric. The treatment is chiefly dietetic—by administration of very sweet articles of food. We are obviously concerned with intoxication by animal poison. The poison glands are yet unknown.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Professorship of Clinical Medicine in Edinburgh.

At a meeting of the University Court on the 20th, Dr. William Russell was appointed to the new Moncrieff Arnott chair of clinical medicine. Dr. Russell is at present the Senior Ordinary physician to the Royal Infirmary, and under the new arrangements was one of the senior lecturers on clinical medicine. He has had a very distinguised career, having obtained a gold medal for his thesis for the degree of M.D. in 1884, and the Cullen Prize of the Royal College of Physicians in 1893. He has lectured on the practice of physic for many years, and has taken a deep interest in the School of Medicine for Women, of which he is at present Dean. Dr. Russell was attached to the Royal Infirmary as pathologist for a number of years in the eighties, and in due course he was elected to the medical staff. He has always associated himself with any movement which has for its object the general welfare of the profession. He has held office in the British Medical Association, being President of the Edinburgh branch. He took a foremost part in organising resistance to the terms of the Insurance Act, and was a moving spirit in the creation of the Scottish Medical Insurance Council, of which he was chairman. When the *Scottish Medical and Surgical Journal* was founded in 1897, Dr. Russell was appointed its first editor, and under his guidance the journal prospered exceedingly. His principal contributions to medical literature are his work on "Arterial Hypertonus," a manual of physical diagnosis, in the authorship of which the late Dr. G. A. Gibson also participated; the section on arterial disease in Gibson's textbook of medicine; the article on "Vessels" in the "Encyclopædia Medica"; "Investigations into some Morbid Cardiac Conditions," and numerous contributions to periodical literature, chiefly on vascular and digestive disorders. Dr. Russell is held in high esteem by his colleagues in the College of Physicians, as is evidenced by the fact that he is a member of the Council of that body, and is their representative on the General Medical Council. He is also a Major in the R.A.M.C. (T.), Scottish 2nd General Hospital.

Murray's Royal Asylum, Perth.

The directors of this Asylum have appointed Dr. R. Dods Brown Physician-Superintendent of the Institution. Dr. Brown is at present Senior Assistant Physician at Morningside Asylum, where he has served both under Sir Thomas Clouston and Dr. George M. Robertson. He now succeeds Dr. Urquhart, who has resigned his office. In his last report, for the year ending March 31st, 1913, Dr. Urquhart states that the patients in the Asylum at the end of the year numbered 120; during the year there were 15 deaths. The average rate of admission is 33 per annum, and in 1912–13 exactly that number of patients were admitted. The number of curable patients was 12, of whom 10 recovered during the year. Twenty-one of the admissions had a bad heredity; in eight morbid heredity was denied. The percentage of deaths was 12.32, the average rate being about 6.23. The average age at death was 73 years, and the average duration of residence nine years. The high death-roll was ascribed to the effect of the inclement season on a community of aged persons.

Gartloch Mental Hospital.

The sixteenth annual report of this asylum, dealing with the year ending May 15th, 1913, has been issued. At the end of the year there were 389 male and 364 female patients in residence. The admissions numbered 235, the discharges 180, and the deaths 90. Twenty-two per cent. of the new patients were under 30, 46 per cent. between 30 and 50, and 32 per cent. over 50. Senile and paralytic cases are very numerous and make the ward work heavy. Owing to an accumulation of residual cases, troublesome and dangerous paranoiacs and epileptics are being crowded more and more closely together, hence the wards are less manageable than they used to be. The only way to improve this is to increase the accommodation, and H.M. Commissioners in Lunacy continue to draw attention to the narrow margin of vacant beds. At July 15th, 1913, there were no empty beds on the female side, and only 24 on the male side. This shortage of beds greatly increases the difficulty of proper supervision; if a patient falls sick he has to be sent to a sick room, and this may mean displacing a patient who ought still to be under observation. In view of these facts, Dr. Parker, the Superintendent, urges that there should be two new blocks for phthisis of 30 beds each. At present it is necessary to treat some males suffering from phthisis on the verandah of the male admission ward. The death-rate for the year was 11.5: of the 90 deaths 18 were due to general paralysis. Alcohol was the main determining cause of the insanity among the admissions; alone, or along with syphilis, it accounted for 20 per cent. The Wassermann test has been extensively carried out during the year. Of 213 admissions tested 30.9 were positive. Dr. Parker anticipates that the first effect of the Mental Deficiency Act will be to strain the present asylum accommodation by increasing the number of deficients. The report of the Commissioner speaks in high terms of the management of Gartloch, and approves of the arrangements being temporarily made by the District Lunacy Board to meet the demands on their accommodation.

Medical Candidates for the Glasgow Municipal Election.

The municipal elections are at hand, and in Glasgow some medical candidates are in the field. Dr. Edward McConnell, who is a bailie, has been for a considerable time in the Town Council, as also has Councillor Dr. James Erskine. The latter, whose term of office now expires, seeks re-election, but is opposed by another candidate. For the representation of Townhead Ward, a younger practitioner, Dr. P. Mackellar Dewar, has come forward to oppose the re-election of a labour representative. The return of Dr. Erskine and Dr. Dewar to the Council would make up the number of medical members to six—certainly not an over-representation of the profession in a body consisting of 113 members and having the care of a population of a million. Of the six referred to, four are engaged in panel practice under the Insurance Act.

BELFAST.

Royal Victoria Hospital.

At the opening of the winter session, a lecture was given by Dr. Rankin, Assistant Physician in Charge of the Electrical Department. After discussion the nature of the work in the wards and out-patient department, Dr. Rankin reviewed the various conceptions that had at various times been entertained on the nature of disease. He showed how these general conceptions influenced our attitude toward the ætiology, diagnosis and treatment of disease. After enumerating some of the latest discoveries in medicine and surgery, he went on to describe more particularly recent advances in electro-therapeutics. He mentioned the use of the X-rays and radium in the treatment of cancer, and concluded by predicting further advance and the increased importance of the electrical department of our medical school.

Mater Infirmorum Hospital.

A new department in connection with X-ray and Finsen light has just been established at the Mater Hospital. On the 23rd inst. the medical staff of the Hospital invited the practitioners of the district to an exhibition of the working of the new installation. There was a large response, and those present were much pleased with the display of the most modern X-ray work. The installation consists of a complete X-ray outfit and a quartz lamp for skin work. The X-ray outfit is one of the largest and most modern in the three kingdoms, and the staff and management of the hospital are to be congratulated on the possession of such an efficient addition to their armamentarium for the diagnosis and treatment of disease.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

INSANITARY FRANCE.

To the Editor of The Medical Press and Circular.

Sir,—Some weeks ago there appeared in your valuable paper some editorial paragraphs on this subject. These were followed by an important correspondence, in which I took a humble part. It may be hard to say whether this discussion of a subject rarely alluded to in French or English journals has had any effect in bringing about the result, but it is gratifying, at any rate, to note that a movement has been started which may in time lead to the drastic reforms in public hygiene called for throughout, in order to bring France in this direction up to the level of civilisation attained by her neighbours. The current French papers give an account of a meeting yesterday (October 15th) of 3,000 delegates from provincial towns to discuss the means of encouraging tourist traffic in France. M. Thierry, Minister of Public Works, presided. The Congress began by discussing the steps needed to improve the standard of country hotels, and to educate hotel keepers in the requirements of modern tourists. It was pointed out that the fact that in Paris and on the Riviera, the only parts of France at present largely visited by tourists, the hotels are mainly in the hands of foreigners, is proof that such education is needed. Hotel hygiene will occupy a good share of the attention of the delegates. This movement, whilst it must prove valuable in an educative way, will not suffice to advance very far the hygienic condition of the country generally, or to remove the shameful and damaging scandal of a death-rate so much higher than that of Great Britain and Germany. The hotels will no doubt in time be provided with closets which themselves will be ventilated and provided with flush-tank apparatus with an adequate supply of water. But if the soil pipes remain unventilated and discharging into foul cesspools or more foul sewers, and if these in their turn are allowed to pollute the smaller watercourses and bigger rivers, very little advantage is likely to accrue to the mass of native inhabitants or foreign sojourners on French soil. In my previous letters I dwelt upon the fact that the gross neglect of public hygiene constitutes a serious handicap to the prosperity of the French nation. It is to be hoped that the new movement which I now report may do something towards impressing this fact upon the leading statesmen who now control the destinies of their country.

I am, Sir, yours truly,
Anglo-Francais.

Boulevard des Capucines, Paris.
October 16th, 1913.

YELLOW *VERSUS* WHITE VASELINE IN THERAPEUTICS.

To the Editor of The Medical Press and Circular.

Sir,—We read with much interest the item in your issue of August 13th, 1913, entitled "Yellow *versus* White Vaseline," and should appreciate your affording us space in your publication for the following observations:—

(1) "Vaseline" is the registered trade mark of the Chesebrough Manufacturing Co., Cons'd., in the United States, Great Britain, and other countries, for use by it alone on products of its manufacture.

(2) We therefore assume your article refers to the white and yellow petrolatum jellies sold by this Company under its trade mark "Vaseline."

(3) There is little or no difference therapeutically between the white and yellow "Vaseline."

(4) From the white has been removed by filtration, not otherwise (as by acids and alkalies) more of the coloured matter—the oxidised carbon—of the crude petroleum, than from the yellow.

(5) Products from petroleum more or less resembling ours in appearance are made by chemical treatment,

and retreatment to wash out the remaining chemicals.

(6) These treatments are variable, unstable, and may be dangerous.

(7) Many of these products are mixtures of paraffin waxes and oils in varying proportions, are subject to separation of the wax from the oil, and retain, more or less, taste and odour of petrolatum.

I am, Sir, yours truly,
per pro Chesebrough Manfg. Co.,
Chas. F. Emery,
General Manager.

Holborn Viaduct, London.
October 23rd, 1913.

[The above communication should be of interest not only to dermatologists, but to the medical profession generally.—Ed. M.P. and C.]

NEW DERMATOLOGIAL SOCIETY OF LONDON. DISCUSSION ON LICHEN PLANUS.

To the Editor of The Medical Press and Circular.

Sir,—I did not receive for correction the shorthand reporter's notes of my remarks on lichen planus during the discussion on that affection which took place on October 9th. Consequently errors and an omission occurred which I should like to correct.

"Where the hair follicles were *well marked*" should read "*not* well marked."

"The lichen planus began *above* the sweat pore and duct" should read " . . . *about* the sweat pore," etc.

I mentioned that I looked upon the sweat apparatus as similar to the excretory organs of the kidney, and that probably the pathology of lichen planus had its counterpart in inflammatory disease of that organ.

I am, Sir, yours truly,
Alfred Eddowes.

28 Wimpole Street, W.
October 27th, 1913.

OBITUARY.

DR. J. D. SWALLOW, OF CLAPHAM.

At Clifton Lodge, Clarence Road, Clapham Park, on the 11th inst., Dr. James Dodd Swallow passed peacefully away, in his 78th year. The deceased was long a well-known and popular figure in Clapham, in the neighbourhood of which he had been practice for nearly 52 years. Born at Henley-on-Thames in 1836, he was first apprenticed to Mr. G. May, a Reading surgeon, after which he went to St. Thomas's Hospital, where he had a very distinguished career, taking his M.D. at St. And., and becoming M.R.C.S.Eng. and L.S.A.Lond. Dr. Swallow first set up in practice in Kennington Park Road, but removed shortly after to 343, Clapham Road, where he remained in practice up to within a week of his death. His loss will be felt deeply by all with whom he came in contact, for he was greatly esteemed on account of his sympathetic nature and kindness of heart. At one time he was reputed to possess the largest practice in South London, and amongst the appointments he had held were those of Surgeon to the Royal South London Dispensary, St. Martin's Hospital for Fistula, the Linen and Woollen Draper's Institution, and the London City Mission. He was greatly interested in medical charities and was Hon. Local Secretary of the Epsom Medical College and the Royal Medical Benevolent Fund. Dr. Swallow leaves a widow, three sons, and one daughter.

DR. A. B. CARPENTER, OF CROYDON.

We regret to announce the death of Dr. Arthur Bristowe Carpenter, M.A., M.B., L.R.C.P., eldest son of one of the most distinguished citizens of Croydon, Dr. Alfred Carpenter, which took place last week. He had suffered from bad health for the last two years, but bravely fought against pain and continued to practise. He had been seriously ill for six weeks, and was removed to a nursing home in the Dingwall Road, where he underwent an operation for an internal complaint on October 14th, and died on the 16th. In his school days at Winchester he gained a scholarship and afterwards a Winchester scholarship, and many other honours at New College, Oxford. He entered as a student at St. Thomas's Hospital, and had several appointments there, and then returned to Croydon and started a practice. He was a member for years of the committee of the Literary and Scientific Institute, also churchwarden of St. James's, and at one time a member of the old Croydon School Board, being first elected in 1891 and re-elected in 1894. He was in early days a good athlete, but his real hobby was bell-ringing, and for a year he was secretary of the Surrey Association of Bell Ringers. He leaves a widow and five children.

REVIEWS OF BOOKS.

DISEASES OF THE STOMACH. (*a*)

The fact that Dr. Einhorn's book has reached its fifth edition is proof of its continued utility to the profession. The present edition shows many advances on its predecessors, the most notable change being in the prominence given now for the first time to the uses of the X-rays in diagnosis. Dr. Einhorn is a clear thinker, and is able to put his teachings in the most easily intelligible form. His chapter on the methods of examination should be studied by every physician. Before proceeding to discuss the more complicated methods, he tells clearly what should be done by the more simple methods of interrogation, inspection, palpation and percussion. It is surprising how much can be learned from a careful and intelligent use of these methods. In his discussion of the causation of gastric ulcer, the author inclines to accept the recently fashionable view of the importance of hyperacidity as the main factor. Like other holders of this theory, he fails to make any suggestion as to how hyperacidity can bring about an ulcer. The fact that hyperacidity is frequently present in cases of gastric ulcer does not give us much help when we bear in mind that, as Dr. Einhorn himself says, gastric disorders are accompanied by hyperchlorhydria in more than one-half of the number of cases of digestive affections. It is right to add that the author maintains that gastric ulcer may occur without hyperacidity. In discussing the treatment of perforated gastric ulcer, Dr. Einhorn refers only casually to surgical treatment—"resort has been lately had to laparotomy." Surely it is recognised by now that surgical treatment is not a matter of choice in case of perforation. Dr. Einhorn gives a useful outline of diet for use in cases of gastric ulcer. The quantity of fluid food he gives in the early stages—viz., nearly two quarts, chiefly milk, in doses of five ounces every hour, seems to us excessive, but no doubt it has given good results in Dr. Einhorn's hands. The book as a whole is thoroughly satisfactory, and should be on every physician's shelves.

CLIMATOLOGY AND MEDICINE. (*b*)

The contents of these lectures are, of course, already known to most of our readers. But the subject is one which must ever retain its freshness and vital importance. The principal aim of the author has been threefold—to show the serious effects of general negligence of climatology; to insist on recognition of the principle of approximate isolation of influences; and to emphasise "the absence of any valid evidence that altitude *per se* affects the prevalence of phthisis." The author's general state of mentality in the connection may be approximately gauged by some experienced readers from the following sentences (found on page 20): "What right have we at present to believe that the

---

(*a*) "Diseases of the Stomach. A Text-Book for Practitioners and Students." By Max Einhorn, M.D. Fifth revised edition. Octavo. Pp. xvi. and 513. Illustrations 112. London: Bailliere, Tindall and Cox. 1913. Price 14s. net.

(*b*) "The Plaoe of Climatology in Medicine." Being the Samuel Hyde Memorial Lectures, read before the Section of Balneology and Climatology of the Royal Society of Medicine, May 20th and 21st, 1913. By William Gordon, M.A., M.D.Cantab., F.R.C.P.Lond., Physician to the Royal Devon and Exeter Hospital, etc. London: A. K. Lewis. 1913.

methods of open air, graduated exercise, and tuberculin administration cannot be aided by judiciously selected climates? It may be that they cannot. But it is wholly unjustifiable to assume it. . . . . 1858 is no doubt a very long while ago, and since then Koch's discovery of the bacillus of tubercle has drawn a barrier of demarcation across the history of phthisis investigation, so that all antecedent statements require investigation." The author's views on bacteriological pathology are very obviously "orthodox." Whether he is truly "scientific" in his notions of climatology, and the application thereof to therapeutics, is a question which must be variously answered; according to the scientific attainments and critical capacity of the reader.

THE HEALTHY MARRIAGE. (*a*)

Believing, as does the author of this little work before us, that the married state is the proper social setting to the natural functions of men and women, he has succeeded in producing a popular manual which should be consulted by every newly-married woman. Interestingly written, in not too technical a style, Dr. Wrench at once appeals to the reader's intellect and leads up by degrees to a homely and helpful explanation of all the phenomena accompanying normal pregnancy, childbirth, and the menopause. We have rarely come across a book in which the ideals of marriage are held up in so exalted a fashion from the sociological and physiological aspects as the one under consideration. As the author wisely remarks, "A sound physiology is the rock upon which to build up firm wedded happiness." Given this desideratum, the rest follows naturally, and the neurasthenic or hysterical disposition will be prevented from developing. In the twenty-two chapters are discussed every topic of vital interest and importance to the married woman. Dr. Wrench is evidently no lover of "tube" railways, for in lamenting the want of exercise from which so many women suffer he desciibes those who work in towns as being "hurtled through an iron bowel buried deep in the earth, with air pumped down to them and the light of the metal filament overhead," until, having arrived at their place of business, their occupation only too often "bends and sacrifices the organism to its peculiar speciality." As might be expected from the author's special experience, the directions given for the preparation of the lying-in chamber, the management of ordinary labour in the absence of skilled medical assistance, are all thoroughly sound and practical. In short, we have no hesitation in recommending this book as an indispensable guide to the prospective mother.

ASTHMA, AND ITS RADICAL TREATMENT. (*b*)

In our present lack of knowledge of satisfactory treatment of the group of symptoms classed together as asthma, any book which helps to clarify our ideas and to indicate a plan of procedure "which fifteen years of experience have proved to be increasingly successful, and which vindicate the view adopted as to the nature of the disease," is likely to be read with considerable interest, even if the beliefs contained therein shall not chance to find immediate and universal acceptance. That immediate belief will follow is hardly to be expected of an attitude of mind balanced and scientific, but the reasons for the author's views will be found to dovetail very closely with our previous knowledge, and, if such success attends the treatment of the patients of other doctors, as is asserted by Dr. Adam in his own experience, then indeed can he claim to have advanced medical science in the amelioration of this widespread and distressing malady. Put shortly, Dr. Adam believes the asthmatic paroxysm to include hyperæmia of the mucous membrane and spasm of the bronchioles, both conditions being the result of toxæmia. According to the kind and extent of the latter, hyperæmia, he says, may vary from that of the recurrent "bronchitis" of children, to "angioneurotic and acute pulmonary œdemas." As regards the importance of the nasal factor, in asthma one is inclined to agree with the author that the value of proper nasal treatment cannot be gainsaid, but that it should be secondary to treatment of the primary toxæmia. The proof of this contention is that asthma can remain unaltered even after extremely drastic nasal operations have been carried out, whilst it promptly clears up on simple anti-toxæmic treatment.

The assumption that asthma is due to a definite toxin causing bronchial spasm, similar in action to muscarin and originated in the intestinal canal appears highly probable, for experimentally it has been found that poisons arise with powerful actions on the nervous system either by the agency of bacteria or through normal enzymatic metabolism of proteins. Normally these are stopped in the intestinal wall and liver, and are antagonised by atropin. Further evidence is statistical and clinical.

Prognosis, according to Dr. Adam, is very favourable if combined nasal and anti-toxæmic treatment be adopted, 76.4 per cent. of cases of *more than ten years standing* being "cured" and 21.3 per cent. improved. The last chapter on treatment is especially to be recommended, whilst the tenor of the whole work encourages the profession to proceed along such hopeful lines.

THE NATURE OF WOMAN. (*a*)

Never was there greater need for clear thinking on what is roughly termed the woman's movement than to-day. Women are becoming more and more eager in claiming a larger share than formerly in political, industrial and social work. That they will do so is certain. That they are adopting methods towards that end of which many people disapprove is irrelevant. The important thing is to have a clear idea of the part that the feminine can best play in these several spheres. That is to say, to learn in advance for what part of the world's work woman is best fitted. What part can she, in fact, play better than man? What part can she alone perform? The essential argument of Mr. Tayler's book, as we understand it, is that woman has fundamental differences from man, as far reaching in mental quality as in physical structure and physiological function. In this we cordially agree, and it is a point too frequently overlooked. Many of the so-called feminists base their arguments for equality with man on an assumed identity of nature, not seeing that the strongest argument for woman's freedom from undue control is that she may be free to develop her own individuality. For emphasising this essential difference of nature we are grateful to Mr. Tayler, even if we do not go with him in his views as to the exact lines on which woman should develop. We cannot regard her as a mere home-maker, even if we agree that her work in the home is the highest of which woman is capable. It seems to us that Mr. Taylor is so irritated by the illogical and short-sighted views of various feminist writers, that he limits his own outlook too narrowly. The truth is that lines of development cannot be accurately foretold; we may, however, form a shrewd judgment of what lines are impossible. An instance of Mr. Tayler's curious perversity is to be found in the first sentence of his book, where he tells us, first, that "the study of sex is primarily a human one," and next, that "sex specialisation and intensity have reached a higher stage in the human species than elsewhere." The first statement reverses the process of evolution, and is, moreover, contradicted by the second, which is itself, we think, untrue. Nevertheless, Mr. Tayler is to be congratulated on having written a thoughtful and interesting book, and one which contains much truth which is too often forgotten.

(*a*) "The Healthy Marriage; a Medical and Psychological Guide for Wives." By G. T. Wrench,, M.D., B.S.Lond., Past Assistant-Master of the Rotunda Hospital, Dublin; Author of "Practical Obstetrics," etc. Pp. viii., 300. London: J. and A. Churchill. 1913. Price 3s. 6d. net.

(*b*) "Asthma, and Its Radical Treatment." By James Adam, M.A., M.D., F.R.F.P.S. Pp. 179 and index v. 1913. London: Henry Kimpton.

(*a*) The Nature of Woman." By J. Lionel Tayler, M.R.C.S., L.R.C.P. Pp. 186. London: A. C. Fifield. 1912.

LITERARY NOTES.

In the October number of the *Medical Chronicle*, Dr. Judson S. Bury, it new editor, states that, in addition to the ordinary features of the journal, references will be given to medical matters in general literature, as well as a number of short extracts from medical and other publications. A warm tribute is paid to the work of the former editors, Drs. Brockbank, and Tylecote. We wish our contemporary continued prosperity under its new rule.

* * *

The "plans for advance" disclosed in *Mercy and Truth*, the organ of the C.M.S. Medical Missions, concern chiefly the supply of living agents and the provision of hospital buildings. It is evident that great care has been expended on the inquiries which have resulted in these proposals, and truly, "the prospect of advance is one which cannot fail to inspire with new hope all who are helpers in the Foreign Missions of the Church." Dr. Lilias Blackett gives the story of a cold weather tour in the Dera Ghazi Khan district.

* * *

The new volume for 1912 of Merck's Annual Report (Vol. XXVI., 1913) is a most useful compendium of modern pharmacology. All the latest advances in pharmaceutical chemistry and therapeutics are dealt with upon the lines of previous issues. An interesting symposium of lecithin occupies the first seventy pages, which is most opportune, seeing how greatly lecithin has come to the front of late in medicine. Many new preparations are also described, together with a succinct *résumé* of the work done during the past year in connection with other newer remedies. An immense amount of information is contained within the 1913 report which cannot fail to be useful to the busy practitioner.

* * *

The second issue of the *British Journal of Surgery* (price 7s. 6d. per copy, or 25s. per annum) fully maintains the high standard of its predecessor. The frontispiece is a portrait of John Hunter, who is described as working the raw material of scientific surgery. Sir John Bland-Sutton writes on the surgery of the spleen. Mr. F. W. Goyder, of Bradford condenses his Jacksonian Essay on the Embryology and Treatment of Cleft Palate into an instructive paper. Recent advances in the surgery of the lung and pleura are dealt with by Mr. H. Morriston Davies. Mr. Andrew Fullerton (Belfast) describes a series of 48 successive nephrectomies with four deaths. An interesting case of sellar decompression is reported by Professor William Thorburn (Manchester), while a review of the more important factors involved in operations upon the hypophysis cerebri is contributed by Mr. Manfred Moritz (Manchester). A good account is given of a visit to Sir Arbuthnot Lane's surgical clinic at Guy's Hospital and to that of Dr. Lambotte at Antwerp.

MEDICAL NEWS & PASS LISTS.

The International Tuberculosis Conference.

The German Empress attended the opening meeting of the International Tuberculosis Conference, which was held on October 23rd, in the Lower House of the Prussian Diet in Berlin. Dr. Franz Bumm presided. The Conference was welcomed by the Secretary of State for the Imperial Ministry of the Interior, Dr. Delbrück, who observed that the Conference was meeting at the place where the international organisation was founded exactly eleven years ago under the patronage of the German Empress. It now embraced the whole world, and united the nations in a common labour for humanity. Speaking of the fight against tuberculosis in Germany, Dr. Delbrück said that there were now 147 sanatoria, with 15,278 beds. There were 103 institutions, with more than 9,000 beds, for children threatened with tuberculosis, 114 forest sanatoria, and 17 forest schools. He observed that England held the lead in the matter of notification, and referred to the new movement in Germany for the isolation of cases in an advanced stage of the disease. This point was endorsed by the Medical Officer of Health for Berlin, who announced that a special tuberculosis hospital, with 1,000 beds, is to be built here.

Of the British representatives, Dr. Barty King, of London, Dr. Nathan Raw, of Liverpool, and Dr. Shennan, of Edinburgh, were present. The subjects discussed were tuberculosis and mankind, and the surgical treatment of tuberculosis. Papers were read by Dr. Louis Rénon, of Paris, about the artificial pneumo-thorax, and by Professor Brauer, of Hamburg, who is a pioneer in the surgical treatment of pulmonary tuberculosis.

Death of a Famous French Surgeon.

News has been received of the sudden death of Dr. Lucas Championnière, the well-known surgeon, which took place suddenly on the 22nd inst, whilst reading a paper before a committee of the Institut de France. He was famous as having been the first to introduce into France the antiseptic method in surgery, which he had learned from Dr. Lister, as far back as 1868. He met Dr. Lister in Scotland in that year, when the new methods in surgery had not yet been generally accepted. He was thus the most active agent in France of the transformation which has changed the whole surgical art in recent times. He was also the author of various works on the radical cure of hernia and surgery of the brain, and on the treatment of fractures by massage. He was to have made a communication to the Institut on the 25th inst., and he was reading the text before the committee when he suddenly fell back in his chair and expired. His death was due to an embolism.

London Medical Referees.

It is reported that the appointment of Medical Referees in London has already resulted in the detection of many cases in which insured persons under the Act were able to work while claiming sickness benefit. At last week's meeting of the London Insurance Committee at Spring Gardens, Mr. Fred Coysh reported that they had had 389 applications for the services of the medical referees and 221 reports had already been furnished from approved societies in respect of those cases. Of the first 255 cases the doctors reported that 108 were able to work, 86 were incapable of work, and the other 61 had chosen between discretion and valour and declared "off." Thus, 34 per cent. of the cases submitted to the referees remained upon the approved societies' deposits at the present time.

The Guild of St. Luke.

The annual service of the Guild of St. Luke for Medical Men was held on October 21st at St. Paul's Cathedral. The preacher was the Rev. Canon Arnott, F.R.C.S., Rector of Beckenham, whose remarks were characterised by practical common-sense and devout spirituality. He pleaded for a greater co-operation between the clergy and medical men, for there was no real need for the subtle antagonism that sometimes existed between them. The first lesson was read by Sir Dyce Duckworth, Bart., M.D. (Vice-Provost of the Guild), while the second was read by the Rev. H. Kirkland-Whittaker, M.D., Secretary. There was a good attendance of members and friends.

Medical Sickness and Accident Society.

At the last meeting of the Executive Committee, held a few days since, Dr. F. J. Allan in the chair, the claim account presented showed a slight margin against the Society, and from figures to hand it would appear that the claims will be heavy for the whole year. New proposals were up to the average, and the proposals for additional benefits show a steady increase. This being the quinquennial valuation year, the results are awaited with a good deal of interest, as it is the sixth quinquennial valuation since the inception of the Society in 1884. In spite of the serious depreciation of gilt-edged securities in which a large part of the Society's Funds are invested, and the consequent writing-down of these, it is expected that a substantial surplus will be shown this year as in the previous reports. Inquiries have been directed to the office as to whether dental surgeons are eligible for membership. There are already a large number in the Society, and members of the dental profession who wish to join are asked to write for a prospectus to the Secretary.

Medical Man found Dead.

Dr. Horace Dimock, the special insurance panel doctor at Wisbech, who was charged with criminal libel and was remanded on bail on Friday last, was found dead in his bed on October 27th.

On Saturday night there was the usual crowd of patients at his surgery, the waiting-room and hall being full, while others waited outside. He told one patient to see him again on Tuesday. On Sunday he visited his patients on his motor cycle, and returning to his home at Stretham, near Ely, at nine o'clock, he went to bed, as he had had no sleep for three nights. On the 27th inst. his sister found him dead in bed.

Dr. Dimock, who was M.B., B.C.Cantab., and M.R.C.S., L.R.C.P., was formerly resident anæsthetist at St. George's Hospital, and Senior House Surgeon at Addenbroke's Hospital, Cambridge. He went to Wisbech from Ely early in the present year to complete the panel of doctors under the Insurance Act.

Society of Apothecaries of London.

At a meeting of the Board of Examiners the following candidates, having passed the necessary examinations, received the L.S.A. diploma of the Society, entitling them to practise Medicine, Surgery, and Midwifery:—W. Alcock, C. Duncan, S. E. Murray, W. E. Masters, and W. V. Tothill.

The Royal College of Physicians Ireland.—Election of Officers.

At the stated annual meeting of the President and Fellows of the Royal College of Physicians of Ireland, held on St. Luke's Day (the 18th inst.), the following officers were elected for the ensuing year:—

President: Dr. Charles E. Fitzgerald; Vice-President: Dr. James Craig.

Censors: Dr. James Craig, Dr. T. G. Moorhead, Dr. A. Nixon Montgomery, and Dr. T. Henry Wilson.

Examiners for the Licence to Practise Midwifery: Dr. Hastings Tweedy and Dr. Gibbon FitzGibbon.

Additional Examiners to take the place of an absent Censor or Examiner: Medicine, Dr. Parsons; Midwifery, Dr. Norman Holmes; Medical Jurisprudence and Hygiene, Dr. H. T. Bewley.

Supplemental Examiners under the Conjoint Examination Scheme: Biology, Dr. MacDowel Cosgrave.

Chemistry: Dr. Edwin Lapper and Dr. Ninian Falkiner.

Physics: Dr. Harvey and Dr. Rowlette.

Pharmacy, Materia Medica and Therapeutics: Dr. Travers Smith and Dr. D. J. O'Connor.

Physiology: Dr. H. C. Earl.

Pathology: Dr. F. C. Purser.

Medicine: Dr. J. F. O'Carroll and Dr. H. C. Drury.

Hygiene and Forensic Medicine: Dr. W. A. Winter.

Extern Examiners for the Conjoint Preliminary Examination: Languages, Mr. E. H. Alton, F.T.C.D.; Mathematics, Mr. R. A. P. Rogers, F.T.C.D.; Irish, Mr. Edward de Valera, B.A., R.U.I.

Examiners for the Diploma in Public Health: Chemistry, Professor E. Lapper; Hygiene, D. F. C. Martley; Bacteriology, Dr. H. C. Earl; Meteorology, Dr. Matson.

Examiners for Membership: Clinical Medicine, Dr. James Craig, V.P., and Dr. George Peacocke; Practice of Medicine, Dr. T. G. Moorhead and Dr. Martin Dempsey; Pathology and Bacteriology, Dr. H. C. Earl and Dr. A. C. O'Sullivan; Midwifery and Gynæcology, Sir William Smyly and Sir Arthur Horne.

Representative on the General Medical Council: Sir John Moore.

Representatives on the Committee of Management: Dr. Walter Smith, Sir John Moore, and Dr. T. P. C. Kirkpatrick.

Treasurer: Dr. H. T. Bewley.

Registrar: Dr. T. Percy C. Kirkpatrick.

Librarian: Mr. R. G. J. Phelps.

Law Agents: Messrs. S. Gordon and Sons.

Land Agents: Messrs. Townsend.

Architect: Mr. A. E. Murray.

Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

The quarterly examinations of the above Board, held in Edinburgh, were concluded on the 25th inst., with the following results:—

First Examination.—The following candidates passed the first examination:—Joseph Michaelson, Andre A. Lamaletie, Venkatasubba Mahaderan, Clifford Pullan, William Jackson, James H. Brown, Alexander Morrison, and Sengarapallai Ponniah. Six passed in Physics, three in Biology, and three in Chemistry.

Second Examination.—The following candidates passed the second examination:—Hugh G. Anderson, James S. Durward, Clarence J. Middleton, John H. Bain, Harry Ellison, Owen G. Evans, and Victor A. Rankin. Two passed in Physiology.

Third Examination.—The following candidates passed the third examination:—Cawton F. Pereira, Joseph V. Duffy, Alexander G. McKee, William MacLeod, Allan G. Bee, William H. Wray, Thomas W. Drummond, John K. Garner, and Robert C. W. Spence. Three passed in Pathology and five in Materia Medica.

Final Examination.—The following candidates having passed the final examination were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.:—Joseph B. Wilman, John B. Aickin, Charles S. Ogilvy, William Bannatyne, Emma C. R. Fisher, Solomon D. Bridge, Bickford J. Hattam, Winnifrid M. Doran, Michael P. Power, John W. McCagie, Venkatasubba Mahadevan, Charles Dolan, Harold E. Rose, Robert H. Thomson, Robert E. N. Martyn-Clark, John N. Clark, Michael V. Walsh, and John R. Smith. Two passed in Medicine, three in Surgery, seven in Midwifery, and fourteen in Medical Jurisprudence.

Conjoint Examinations in Ireland.

The following candidates have passed the First Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, October, 1913:—

J. Cusack, L. Finnegan, P. J. Flood, W. F. Moorhead, W. H. Pierce and W. H. Sexton.

The following candidates have passed the Preliminary Examination of the Royal College of Physicians and the Royal College of Surgeons, October, 1913:—

J. J. Brennan (passed with honours), M. C. Albuquerque, J. T. Alcock, E. S. Becker, V. A. Carroll, S. Conway, T. H. Cooper, R. J. Cussen, J. Denaher, B. Epstein, J. A. F. Flynn, S. J. Halpin, J. A. Hamilton, W. R. Henry, N. L. C. Irwin, P. McAndrew, P. J. McGing, C. McGlade, E. J. Magner, M. R. Morris, C. J. H. Mouritz, G. O. Nightingale, H. O'Neill, J. C. Rowan, V. E. Stack, P. G. L. W. Suys, J. F. Thornton, R. Walters, F. J. Walsh, and R. P. Williams

Intending medical students are required to register their names at once, as the lectures of the new session are now in progress.

Among the names added the other day in congregation to the list of benefactors of the University of Oxford was that of Dr. Theodore Williams.

The Chelsea Hospital for Women has received a grant of £500 from the Trustees of the Zunz Bequest. This donation is additional to the Trustees' promise of £10,000 towards the Rebuilding Fund.

Dr. and Mrs. C. H. Wise, who have recently left Walthamstow for the South of England, were the recipients the other day of a handsome presentation as a token of the esteem and respect in which they have been held by the inhabitants during their thirty years' residence in the district.

Summary of Recent Medical Literature English and Foreign.

Specially compiled for The Medical Press and Circular.

Emptying the Uterus as a Method of Treatment of Eclampsia.—Peterson (*Amer. Jnl. of Obs.*, lxviii., 2) has collected statistics of a large number of cases from various clinics, and claims that these show that prompt delivery gave a maternal mortality of 15.9 per cent., as compared with a maternal mortality of 28.9 per cent. when the delivery was long delayed. When the uterus is emptied immediately or very soon after the onset of the first convulsion, the maternal mortality is still lower. Before 1900 a large group of cases show 5 per cent. in favour of the conservative method of treatment, but from 1900 to 1912, on account of better and more prompt obstetric surgery the figures are reversed, and show that the mortality is lower by 4 per cent. after the radical as opposed to the conservative treatment of the complication. Therefore the treatment of ante-partum eclampsia should consist of emptying the uterus as quickly as possible after the onset of the first convulsion. The operative procedure which will empty the uterus the quickest with minimum trauma and shock to the eclamptic mother and child should be selected. The tables also show that the operative treatment has reduced the fœtal mortality. F.

The Medical and Surgical Treatment of Eclampsia. Zinke (*Amer. Jnl. Obs.*, lxvii., 6), from a review of the reported cases, is compelled to disagree with those who hold that the immediate emptying of the uterus is the best and only treatment for eclamptic convulsions and that it has reduced the mortality of the disease. He claims that the operative treatment has raised the maternal mortality by 1.75 per cent. above the average mortality obtained under various methods without hysterotomy. Cæsarean section gives a much higher mortality, according to the list of cases collected by Moran, and although the report is stated to show a steady improvement, the author cannot appreciate it. The absolute disregard for medical treatment in these cases is as flagrant as is the advocacy of surgical intervention as the only measure of relief. In the management of eclampsia much more good is to be obtained through intelligent medical care than some are willing to admit. The treatment of eclampsia on medical lines, as advocated by the author, is fully described. It is divided into prophylactic, (*a*) as applied to pregnant women, and (*b*) after the appearance of symptoms. Under the former head he advises milk diet, catharsis, hot baths, fresh air in abundance, gentle exercise, calisthenics and massage, suitable dress, sleep and rest in bed; the curative treatment deals with the control or abbreviation of the convulsions by the use of veratrum viride and the employment of bleeding in suitable cases; the use of chloroform is questionable, and chloral has been disappointing. The use of normal saline by rectum and hypodermoclysis is strongly urged, and oxygen inhalation is said to be of value. If the patient is at the end of the first stage of labour, and then only if the symptoms are grave, forceps may be employed to terminate labour. F.

Indications for Abdominal Cæsarean Section.—Peterson (*Surg., Gyn. and Obs.*, xvii., 2) in a short paper divides and considers the indications for Cæsarean section under three heads—(1) obstructions to labour, which include contracted pelvis, obstructions by tumours, stenosis of cervix or vagina, and miscellaneous conditions, such as ventrofixations, large size of child; (2) uterine hæmorrhages; (3) constitutional crises, eclampsia. In dealing with eclampsia, he says "that for those who do not believe in the immediate emptying of the uterus as soon as the patient has been seized with convulsions, neither abdominal nor vaginal Cæsarean section are ever indicated," but that "the majority of obstetricians" do believe in this, and therefore with eclampsia in a case with contracted velvis, and which has not been infected by manipulations or repeated examinations Cæsarean section is indicated. He concludes by saying that he is tabulating the results of 425 cases of eclampsia treated by Cæsarean section, 317 since 1900, and performed by over 200 operators. "The maternal mortality for the total number is 31.9 per cent."; of those treated "since 1900 it is 31.8 per cent." This reduction is produced by the operations being performed after what the author terms the beginning of the "aseptic era," and may therefore be considered due to aseptic *technique*. The 50 per cent. mortality is ascribed to errors in the selection of cases, because many were subjected to operation when they were hopelessly septic." "In 245 cases where there was no sepsis, or very little chance of sepsis prior to operation, the mortality is only 24 per cent." The infantile mortality for 317 cases is 5.5 per cent., and where the operations were performed after from one to five convulsions was further reduced to 3.7 per cent. From these statistics the future report should be interesting as showing how statistics can be made to support a theory in spite of figures. It is doubtful if any institution or any individual series of cases of eclampsia could be found which gives a mortality of 48 per cent. from any other line of treatment, and even taking the selected cases, 245 in number, which were evidently operated upon early, the probability is that even if the patients were left with no other treatment than starvation and a competent attendant, who would prevent their suffocating during the convulsions, the maternal mortality would not be much if any higher than 24 per cent. These statistics are particularly interesting when taken with the paper by Zinke previously summarised in this number, and in which this matter is touched upon. Peterson ends his paper by saying: "At least, the statistics in over 400 cases have shown beyond a doubt that no one is justified in dismissing the treatment of eclampsia by abdominal Cæsarean section with a short statement that the mortality is so high as to make it an unjustifiable operation." It is to be asked what mortality will make an operation unjustifiable. E.

Extra-uterine Pregnancy and Its Subsequent History.—Williams (*Amer. Jnl. Obs.*, lxvii., 6), from a study of 147 cases, reports the following facts:—Nineteen per cent. occurred in primiparous women; 8 per cent. were illegitimate pregnancies; 30 per cent. had a previous history of abortion; and 28 per cent. were preceded by premature confinement. The average interval after a uterine pregnancy until the extra-uterine pregnancy developed was 45 months. Recovery was noted in all the 17 cases operated upon during shock. Seven cases subsequently developed extra-uterine pregnancies at an average interval of 24 months. Thirty cases did not develop any subsequent pregnancies, while 39 intra-uterine pregnancies have developed subsequently, 28 ending at term and three being still pregnant. F.

Esthiomène or Lupus Vulvæ.—Kurz (*Jnl. Obs. and Gyn. Brit. Emp.*, xxiii., 6), from an analysis of six cases studied and reported, and the vast amount of literature published on the subject, concludes that this condition is a tertiary syphilitic manifestation, and that the syphilitic virus is the sole cause. The grounds upon which he forms this conclusion are, that the poor and neglected furnish the majority of cases, and servants, wives of soldiers and sailors are amongst the most frequent victims. Sterility, relative or absolute, is common. The age and period of occurrence in the cases reported varied from 20 to 50 years, but an old syphilitic history was suggested in all. In most cases some other indication of syphilis was present, and the condition might persist and progress without producing any marked change in general health, even after many years' duration, and might cause very little inconvenience. The presence or absence of enlarged inguinal glands does not influence the diagnosis. They might in early cases be syphilitic and in late cases septic in origin. The chronicity of esthiomène is a significant feature. In no other ulcerative condition is the history so long and so little disturbing in its effects. After a great many years it may cause death through malnutrition or toxæmia arising from fistulous burrowings. The condition does not always respond to anti-syphilitic treatment, but this depends on the duration and nature of the burrowings of the ulceration; early cases do respond, but old-standing ones do not. The cases respond to anti-syphilitic treatment combined with surgical methods and cleanliness and feeding. Histologically, esthiomène tissues are gummatous; they undergo the usual process of necrosis and cicatrisation. (A very full bibliography is given.) F.

Menstrual Molimina.—Chisholm (*Jnl. Obs. and Gyn. Brit. Emp.*, xxiii., 6), from inquiries among a number of adults engaged in various occupations, draws the following conclusions, which have been compared with facts previously collected from inquiries made amongst a number of young girls. Among adults the cases of disturbance at the menstrual periods are many more than among adolescents. Passive hyperæmia of the pelvic organs appears to be the cause of much local pain. This is relieved in the majority of cases in the first day after onset of menstruation. Unhealthy hygienic conditions and mode of life contribute to lowering the general nervous system, so that pain is readily felt, and a habit of pain at the periods is formed. Nervous symptoms, reflex and vasomotor, are often associated with secondary menstrual discomfort. Except in a small minority, this menstrual disturbance does not affect the woman's capacity for carrying on her ordinary work. Any development of menstrual pain shows a pathological condition whose cause, whether local or general, should be investigated and treated before the discomfort becomes established as a regular habit. F.

The Elastic Area in the Isthmus of the Uterus a Positive Sign of Pregnancy.—Ladinski (*Amer. Jnl. Obs.*, lxviii., 2) says that he has invariably found in early uterine pregnancy a circular area situated in the median line of the anterior surface of the body of the uterus, just above the junction of the body and cervix, that is, at the isthmus of the uterus, which varies in size according to the duration of pregnancy, and offers to the palpating finger the distinct sensation of elastic fluctuation. It can frequently be made out as early as the fifth week, when the area is only the size of a finger tip, and can always be felt in the sixth week. The area varies in size in a crescentic manner, and extends upwards towards the fundus until the third month, when nearly the entire anterior surface of the uterus presents a fluctuating cystic feel to the examining finger. The sign is not to be confused with Hegar's sign of softening, thinning and compressibility of the entire lower uterine segment. The author claims for his sign earlier appearance, constant and invariable pressure, greater ease and facility in detection over Hegar's sign, which would warrant general acceptance. The explanation of the cause of the change is not definite, but it is suggested that it is due to a hypertrophic process involving not only the muscle fibres and connective tissue, but especially the lymphatic and vascular structures of the uterus. F.

Vaccines in Enteric Fever.—Randolph (*New York Med. Journ.*, September 6th, 1913) records the result of his experience in treating enteric fever by vaccines. The patients treated may be divided into four groups; (1) those in whom the treatment was begun early in the infection; (2) those who had been ill for ten days or more; (3) terminal cases; (4) patients suffering from relapse or delayed resolution. The vaccine given was the same as that used by the United States Army for prophylaxis against typhoid fever. There was considerable variation in the dose given, as Dr. Randolph was trying to find out the best method of giving it. The vaccine is supplied in one c.c. ampoules, each containing one billion bacilli, and in his more recent cases Dr. Randolph has been using one-third of a c.c. for each dose. Three days' interval was generally allowed between each dose, but it is suggested that perhaps two days' interval would be more satisfactory. The general reaction following the injection of the vaccine varied a good deal. In the height of the disease a febrile reaction was not produced, but later on, as the temperature began to fall, the injection was generally followed by a sharp increase of fever, which lasted for from twelve to twenty-four hours. Patients in the stage of delayed convalescence or relapse exhibited a much sharper reaction, both local and general, than have those in the acute stage of the primary infection. Dr. Randolph admits that the number of the cases he has recorded is too small to enable him to draw any useful generalisations from his results, but he has a strong clinical impression that the vaccine treatment had a beneficial effect in the acute stage of the fever, and that this effect was better the earlier the administration was begun. All his patients expressed themselves as feeling better after the administration of the second dose of the vaccine. K.

Treatment of Pneumonia by Means of Specific Serums.—Cole (*Journ. Amer. Med. Assoc.*, August 30th, 1913) gives the following summary of his conclusions on the treatment of pneumonia by specific serums:—Antipneumococcus serum, in order to be effective, must be given early and in large amounts. Since pneumococci, so far as their immunity properties are concerned, are divided into distinct groups, it is necessary in each case to administer the serum active against the group to which the organism infecting the patient belongs. Highly active serums against two groups of pneumococci have been obtained, and treatment has been carried out in a small number of cases. The effect in these cases has been favourable, and the mortality has been very low. In judging of the value of serums, however, other facts are considered of more importance, namely, first, that bacteria in the blood are destroyed; and second, that immune substances, which ordinarily appear in the blood about the time of crisis, appear in the treated cases very soon after the administration of the serum. Lastly, there is some experimental evidence that part of the action of the immune serum may be antitoxic. K.

The Position of the Stomach in Children.—Sever (*New York Med. Journ.*, September 20th, 1913) has made an investigation of eighty-three averagely developed children to determine the normal position of the stomach. He concludes that it is usually situated much lower than one had previously suspected, and that it is not unusual to find the stomach at or below the crests of the ilium. The children were healthy and showed no symptoms of disorder as far as their digestive apparatus was concerned. In the majority of the children the stomach was large and either of the horizontal or of the "sink drain" type, while the so-called "cow's horn" stomach was rare. K.

Congenital Hypertrophic Stenosis of the Pylorus.—Mixter (*Bost. Med. and Sur. Journ.*, August 28th, 1913) records an invesigation into this condition, from which he draws the following conclusions:—An early diagnosis is the most essential factor in lowering the mortality from this disease. The bismuth X-ray will conclusively demonstrate the presence of pyloric obstruction. In any patient in whom careful medical treatment has failed to check the vomiting and progressive loss of weight, and where a pyloric obstruction can be demonstrated by X-rays, even if the differential diagnosis cannot be definitely made between hypertrophic stenosis and pylorospasm, exploration should be advised. X-ray photographs taken at varying intervals after operation show the pyloric obstruction to be a permanent condition, and in the patients studied the spasm was a factor of no importance in the obstruction. In true stenosis, surgery offers the only hope of cure. An infant develops normally after a posterior gastro-enterostomy. K.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DR. T. M. (N. Wales).—Since the establishment of the British Goat Society, which publishes a monthly register and herd-book, a great deal of useful information has been collected regarding the breeding of goats. It is well known, of course, that goat's milk is a safe food for consumptives, being preferable in many ways to cow's milk.

MR. W. JOHNSON (Ealing, W.).—According to recent returns, compensation was paid, in 1912, in 3,599 cases of death and in 424,406 cases of disablement under the provisions of the Workmen's Compensation Act and Employers' Liability Act. The average payment in each case was £158, and in case of disablement, £6 3s.

M.B.LOND. (Essex).—It may be stated roughly that sugar is now one of the cheapest of fuel foods, a shilling spent on it yielding 11,000 calories, which is more than can be obtained from the same amount of money spent on bread. As a general rule, the consumption of sugar is in the inverse ratio of the consumption of alcohol.

F.R.C.S. (Lincs).—Our correspondent will find a recent paper in *La Presse Medical,* No. 70, in which Aubert puts forward strong arguments in favour of the conception of erythema nodosum as a "pre-tuberculous" manifestation. Other observers have also considered that this disease is frequently the expression of the earliest phase of infection with the tubercle bacillus.

Meetings of the Societies, Lectures, &c

WEDNESDAY, OCTOBER 29TH.

BRITISH OTO-LARYNGOLOGICAL SOCIETY (11 Chandos Street, Cavendish Square, W.).—4 p.m.: Clinical Meeting.

THURSDAY, OCTOBER 30TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1 Wimpole Street, W.).—5 p.m.: Professor G. Elliott Smith: The Contributions of Ancient Egypt to the History of Medicine.

ROYAL SOCIETY OF MEDICINE (SECTION OF NEUROLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Presidential Address: Mr. William Thornburn.

CHILD STUDY SOCIETY, LONDON (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Prof. W. Rippmann: Child Speech.

MONDAY, NOVEMBER 3RD.

SOCIETY FOR THE STUDY OF INEBRIETY.—Fifth Norman Kerr Lecture by Sir Thomas S. Clouston, LL.D., M.D., in the Hall of the Royal College of Physicians, Queen Street, Edinburgh. 4 p.m. Subject: "The Clinical Aspects of the Study of Inebriety."

TUESDAY, NOVEMBER 4TH.

ROYAL SOCIETY OF MEDICINE (SUB-SECTION OF ORTHOPÆDICS) (1 Wimpole Street).—4.30 p.m.: First Meeting.

ROYAL SOCIETY OF MEDICINE (SECTION OF PATHOLOGY).—8.30 p.m.: Demonstrations at the Imperial Cancer Research Laboratory, Queen Square.

WEDNESDAY, NOVEMBER 5TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8 p.m.: Cases by Messrs. Sydney Stephenson, George Coats, Charles Killick, A. S. Cobbledick. 8.30 p.m.: Papers by Mr. George Coats and Mr. C. Wray.

Appointments.

FRASER, Sir THOMAS, M.D.Edin., F.R.C.P.Edin., Chairman of the Medical Lecturers in the Royal Infirmary, Edinburgh.

GARRETT, P. C., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Dursley District of the county of Gloucester.

LYLE, JAMES DUNCAN, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Assistant Anæsthetist to the London Hospital.

MACKIE, WILLIAM, M.D., M.S.Aberd., Medical Referee under the Workmen's Compensation Act, 1906, for the Sheriffdom of Inverness, Elgin, and Nairn.

NELSON, H. RUNDLE, B.S., M.D.Dub., Quarantine Officer at William Head, Vancouver Island.

PALMER, S., M.D.Durh., Police Surgeon to the South District of Liverpool.

Vacancies.

Joint Counties Asylum, Carmarthen, South Wales.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk and washing. Applications to the Medical Superintendent, Asylum, Maidstone.

City of Westminster Union.—Assistant Medical Officer. Salary £160 per annum, with board, residence, and washing. Applications to W. J. Lickley, Clerk, Guardians' Offices, Princes Row, Buckingham Palace Road, S.W.

Lancashire County Asylum, Winwick, Warrington.—Assistant Medical Officer. Salary £200 per annum, with furnished apartments, attendance, and washing. Applications to the Medical Superintendent.

Bradford Union.—Assistant Resident Medical Officer.—Eastby Sanatorium. Salary £130 per annum, with rations, apartments, and laundry. Applications to George M. Crowther, Clerk to the Guardians, Union Offices, 22, Manor Row, Bradford.

London County Asylum, Hanwell, W.—Junior Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, and washing. Applications to H. F. Keene, Clerk of the Asylums Committee, Asylums Committee Office, 6 Waterloo Place, S.W.

Births.

CRAIG.—On October 24th, at 54 Welbeck Street, W., the wife of Dr. Maurice Craig, of a daughter.

MORISON.—On October 20th, at Marlborough Gardens, Stanwix, Carlisle, the wife of Dr. Morison, of a son.

MURRAY.—On October 25th, at 14 Moncrieffe Road, Sheffield, the wife of C. Graham Murray, M.D., of a daughter.

REES-ROBERTS.—On October 26th, at Danesfield, Walton-on-Thames, to Dr. and Mrs. Rees-Roberts, of 14 Park Lane, W.—a daughter (first-born).

TULK-HART.—On October 19th, at 4 Gloucester Place, Brighton, Blanche Madeline, wife of T. Tulk-Hart, M.D., B.S., of a son.

WILKINSON.—On October 26th, at Kemnal, Caversham, Oxon., the wife of Lt.-Colonel Edmund Wilkinson, Indian Medical Service, of a daughter.

Marriages.

BAILEY—SLOAN.—On October 22nd, at Sandyford Parish Church, Glasgow, the Rev. T. Graham Bailey, B.D., Church of Scotland Mission, Wazirabad, to Agnes Bankier Sloan, M.B., Ch.B., second daughter of Alexander Sloan, Chartered Accountant, Glasgow.

GILLIES—STEWART.—On October 22nd, at St. Giles, Edinburgh, Hugh Gillies, M.R.C.P., New Abbey, son of the late Dr. Hugh Gillies, Easdale, to Janet McCulloch, elder daughter of the late Captain William Stewart, of Shambellie, in the Stewartry of Kirkcudbright.

HOLFORD—LOTT.—On October 21st, at St. Mary Abbots, Kensington, Christopher Tredwell Holford, F.R.C.S.Edin., M.R.C.S.Eng., L.R.C.P.Lond., son of Mr. and Mrs. Christopher T. Holford, of 5 Northumberland Avenue, Putney, to Doris Emily Lott, younger daughter of Mr. and Mrs. Frank E. Lott, of Alexandra Road, Burton-on-Trent.

LACEY—BARBER.—On October 23rd, at St. Andrew's, Hertford, Herts, William Stocks Lacey, L.R.C.P.Lond., M.R.C.S.Eng., L.D.S.Eng., D.M.D.Harvard, only son of Mr. and Mrs. William J. M. Lacey, of Clyde House, Hertford, to Mabel, only daughter of Mr. and Mrs. Thomas Barber, of Castle Street, Hertford.

Deaths.

O'NEILL.—On October 15th, at Endsleigh Gardens, London, Surg.-Lt.-Col. John O'Neill, late of the Indian Army Medical Service, aged 65.

PARSONS.—On October 25th, at Fulham Infirmary, Hammersmith, W., Amy Elizabeth, the dearly loved wife of Christopher Thackray Parsons, M.D., and second daughter of the late James Hunter, Liverpool.

WILLIAMS.—On October 24th, at St. Thomas's Hospital, Doctor Edgar Williams, of Beyrout, Syria, aged 46.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, NOVEMBER 5, 1913. NO. 19.

NOTES AND COMMENTS.

Camberwell Again!

THE Metropolitan Borough of Camberwell seems to have a faculty for getting into the medical limelight. Her dispute, we understand, is still alive as to the propriety of storing trucks of town filth within a few yards of the Infirmary in neighbouring Southwark. The Camberwell Medical Officer of Health furnished a report explaining that the dust from the trucks could not traverse the intervening space. The good, easy minds of his Council readily grasped this theory as absolute proof that invisible germs of enteritis could not possibly have been conveyed from the trucks to the Infirmary. Nor did the Local Government Board see fit to intervene in this tempest of Bumbledom, behind the comedy of which were stretched the stark bodies of some dozen or so Southwark paupers. The attempt to get at the cause of their deaths has led to a pretty pother indeed! As the local Coroner has failed to deal with the deaths, it is somewhat interesting to find the Guardians of Southwark thus suddenly imbued with scientific curiosity. Last week the Camberwell Guardians were called upon to consider the strained relations between the Superintendent and the Resident of their own Infirmary. The Chief reported that the Assistant Medical Officers complained they had not sufficient time to play tennis, that they were restricted in piano-playing, and had to be indoors by 12.30 three times a week. It would, of course, be impossible to hazard an opinion as to the merits of the case without full information as to the conditions of the work performed by the Assistant Officers. All work and no play, as the world has long recognised, makes Jack a dull boy. Possibly the L.G.B. might be able to settle this point, which, be it said, in spite of its seeming triviality, goes deep into the root of all efficient medical service.

The York County Hospital.

THE affair of the York County Hospital is still unsettled, a fact that in itself furnishes a seathing comment on the chaos of our voluntary hospital system. Thanks to the initiative of the *Hospital*, a vigorous complaint by two former residents of the Institution in question was publicly and fully investigated. The inquiry was conducted by Sir Cooper Perry, who published a singularly able and just report upon the whole matter. In an internal dispute of the kind it is often extremely difficult to estimate the precise value of evidence and to arrive at demonstrably sound conclusions. In the present instance Sir Cooper had the assistance of a legal assessor, and learned counsel appeared on behalf of the various parties concerned. The result of the investigation may be thus summed up: Out of twenty-six charges made by the residents, fifteen were more or less successfully sustained. Some of the points thus established were of a serious nature, and revealed an administrative laxity and ineptitude of no ordinary degree. In short, the management of the York County Hospital was called upon to answer a scathing indictment before the bar of public opinion. Upwards of three months has elapsed since the publication of Sir Cooper Perry's report, a somewhat prolonged period, one would think, for the delivery of a formal reply by a management that has on more than one occasion indignantly repudiated the criticisms passed upon its methods of administrative control. To ordinary folk it seemed clear enough that the report had established beyond the shadow of a doubt the fact that reforms of a drastic nature were demanded if the York County Hospital were to regain its position as a well-ordered voluntary hospital.

The Committee's Explanation.

As the result of three months' deliberation, the House Committee of the York Hospital have furnished a report upon Sir Cooper Perry's report. It has held eleven meetings and has interviewed members of the medical staff as well as one former resident and the matron. As the result of its labours, it has furnished a white-washing document which has since been formally approved by the Committee and the Medical Board. The Sub-Committee, no less than the Committee itself, has apparently failed to grasp the elementary fact that it was responsible for the proper administration of the Hospital and that its admitted and established failure in various directions cannot be palliated by measures compounded of a few half-hearted confessions, of recriminations, of assertive denials, of evasions, and of self-congratulations and approval, combined with a modicum of suggested reform. The proper course, we submit, is to call together the governors of the York Hospital, and to ask them their candid opinion upon Sir Cooper Perry's report. At the meeting one would expect any self-respecting body of management, faced with an adverse public report of the weight and authority of the one in question, to hand in their resignations, which might or might not be accepted by the main body of the governors. The ultimate judgment must come from the public. Already, so it has been announced, the York Labour Party has resolved that it will advise working men to withdraw their support from the Hospital unless the recommendations of Sir Cooper's report are at once adopted. The management will gain nothing by deferring the date of their public defence. It is clear that the duties of a matron and her relations to the medical residents should be in future clearly defined in all hospitals that hope to escape "scandals" of the York County type.

The Anæsthetic Room. Most anæsthetists will agree that quiet and peaceful surroundings are desirable for the administration of ether and chloroform, especially to nervous and excitable patients. The dread of an approaching operation is a very real thing, and everything should be done to minimise the condition of mental distress, if not actual fright, that is apt to supervene prior to the ordeal. In the majority of modern hospitals the operating-theatre is provided with a room, or even a suite of rooms, in which the patient can be anæsthetised privately, so that he is spared the somewhat alarming vision of an array of instruments, bowls and trays. Where space has to be considered and no anæsthetic room is available it is usually possible to screen the various surgical paraphernalia from the patient's view. Even then, the knowledge that he is already inside the place of operation is quite sufficient to upset the nerves of a sensitive person, so that he is thereby less fit to take the anæsthetic quietly. In the case of a death under chloroform which occurred at a provincial hospital the other day, it was stated at the inquest that the patient was examined, anæsthetised and operated upon in the operating theatre. The heart failed, apparently, as the result of fright, for the organ was perfectly sound. The jury recommended, and rightly so, that patients should be examined and the anæsthetic administered before being taken into the operating theatre.

The Wisbech Demonstrations. Seldom have the death and funeral of a country medical practitioner been marked by such scenes as were witnessed last week at Wisbech upon the occasion of the interment of Dr. Horace Dimock, at Stretham. It will be remembered that the deceased was found dead in bed after proceedings for criminal libel had been instituted against him. Dr. Dimock was said to have been the last of the panel doctors appointed for Wisbech, and to have incurred a certain amount of local opposition, if not an actual boycott, thereby. However, he speedily earned considerable popularity, and he is said to have had 2,500 persons on his list. Local ill-feeling continued to run high, the sending of anonymous abusive postcards, alleged to have come from insured persons, to several practitioners in the district, resulting in the action referred to above. As the inquest upon Dr. Dimock has been adjourned we are precluded from speculating upon the cause of his death. It is significant, though, that one of the wreaths upon his coffin bore testimony to the fact that he was "worried by the few, but loved by the many." At any rate, it is easy to see from the expressions of sympathy passed at the huge mass meeting at Wisbech, attended by about 5,000 persons, that the deceased practitioner's services were appreciated by the public whom he served. It is satisfactory to note that the promoters of the meeting, together with the great majority of the more sober-minded among the crowd, dispersed quietly to their homes. A certain section of the mob, indignant at what they imagined was the unjust persecution of Dr. Dimock, smashed the windows of certain other medical practitioners who they thought were the cause of all the strife. The reading of the Riot Act and the arrival of a posse of police, happily relieved a situation the necessity for which need never have arisen if small misunderstandings had not been magnified.

LEADING ARTICLES.

THE COMMISSION ON VENEREAL DISEASE.

The recent appointment of a Royal Commission upon venereal diseases registers an event of first-rate social importance. Reduced to its simpler terms, it is in point of fact a logical development of that public health movement which has done so much to ameliorate the conditions of our modern civilisation. Once given the knowledge of the causation of various human infective maladies, and the application of measures of prevention must follow sooner or later in communities actuated by the elementary instinct of collective self-preservation. Modern medical science has enabled the State to legislate against infectious maladies by such salutary measures as vaccination, compulsory notification, isolation, and disinfection, and less directly by drainage, disposal of refuse, the supply of pure water and so on. The State, in fact, is realising the economic value of the health of the citizen as a national asset. In the matter of tuberculosis it has brought the full resources of the nation to bear upon its extinction, and it may be not unreasonably anticipated that ere long the world will be practically rid of that particular scourge. As to another widespread foe of humanity, venereal dieases, public sentiment has hitherto blocked the way to effectual collective action. The fact that such disease is commonly spread by impure sexual intercourse has led to a pretty general attempt on the part of society to ignore its existence. This attitude, however understandable to the moralist, is incompatible with the State-accepted responsibility of protecting the nation so far as may be from the ravages of infectious disease. The incidence of venereal maladies, like the rain from Heaven, is upon the righteous as well as the unrighteous. It would tax the subtlety of the sternest moralist to justify the transmission of syphilis or gonorrhœa to innocent persons by purely extra-genital channels. Medical science, however, has not to deal with motives or conduct in this particular matter, but is rather concerned with the expulsion of the malady from the community. Happily, such a consummation has been rendered possible by the rapid advances in pathology, diagnosis and treatment connected with such eminent observers as, to mention a few only, Schaudin, Wassermann, Ehrlich, Neisser, Noguchi, and, in our own country, MacDonagh. The present situation with regard to this class of disease is clear and encouraging. It is possible, in a word, to do away with syphilis and gonorrhœa as surely as plague, rabies and cholera have been banished from the shores of the United Kingdom. In response to an appeal by certain prominent members of the medical profession Government has appointed a Royal Commission of Inquiry into the circumstances attending the incidence and the prevention of venereal diseases.

There can be little doubt that, at some future time, the State will adopt measures of prevention based upon the information derived from the labours of their Commission. That intention will be strengthened by the encouraging results that have followed the application of modern scientific methods to the control of that class of disease in the army. A remarkable change of mental attitude has come upon society with regard to these special maladies. It is no longer thought shameful for pure-minded folk of either sex to have a knowledge of, and to discuss, their nature and their existence. Indeed, social reformers of the highest standing openly advocate that young persons, male and female, should not be brought up in ignorance of facts that may affect profoundly, not only their own future welfare. but also that of their children. It is not the first time that the legislature has considered the control of these diseases by statutory means. The Contagious Diseases Act was enforced for several years, and its operations were attended with no small measure of success. It was exceedingly restricted in its scope, however, and dealt with the public women only of certain towns. It was soon found that the women concerned were subjected to the risk of official injustice, and the Act was finally repealed at the instigation of a small but powerful band of opponents. There is no likelihood of a similar element of compulsion, directed against a single sex, being revived. It may possibly be one day possible to treat venereal maladies more closely on the analogy of the more serious ordinary communicable infections. That and other points of prevention will doubtless be threshed out before the Royal Commission, the appointment of which marks a new era in the evolution of a sane collective morality, based on the sure ground of science and guided by a firm grip of the economics of public health.

THE HEALTH OF THE CITY OF LONDON.

The Report of the Medical Officer of Health for the City of London always contains interesting matter, and that for 1912 is no exception to the rule. Dr. W. Collingridge, who has now relinquished office, was assisted in the preparation of the report by Dr. W. J. Howarth, the present Medical Officer of Health. On the subject of the milk supply, the report states that in order to determine to what extent milk on arrival in London could be regarded as responsible for the dissemination of tuberculosis a system of taking samples on arrival at the great railway termini within the City boundaries and submitting them to bacteriological examination was instituted in 1902. Thirty samples were taken in January last and submitted to Dr. Andrews for bacteriological examination. He reports: "I have on occasions, when the results of an investigation have been of a more satisfactory character, felt that the efforts made to secure a pure and wholesome milk supply for the people of London have not been altogether unsuccessful, but these feelings have been quickly banished by the unsatisfactory results of subsequent inquiries which have made it apparent that until the hands of farmers, dairymen, and others engaged in the distribution of this indispensable commodity are forced by Statute, no real or lasting improvement can be looked for. This investigation, however, revealed a marked improvement in the type of churn used for conveyance. The old objectionable pattern, which, under the mistaken idea of providing 'ventilation,' afforded means of access to all kinds of dirt in transit, is gradually being replaced by dust-proof, sealed and locked churns, which, if the milk be clean and properly cooled at the farm and properly dealt with in transit, will do much to ensure its delivery in a proper condition. Milk from which eighteen of the samples referred to above were taken was contained in properly constructed receptacles, locked and unventilated." Twenty per cent. of these samples were dirty, and 33.3 per cent. were clean. A matter of great practical importance is referred to by Dr. Collingridge, to which we alluded only a few weeks ago in our columns—namely, the question of the sanitation of offices where clerks, warehousemen, typists, and others are employed. Many such persons, who belong to a very deserving class, are "earning their daily bread in surroundings of a most unsatisfactory and even dangerous character." Here, again, common experience supplies conclusive evidence. In the business quarters of London there are thousands of offices which are as ill-suited and as ill-equipped as they could possibly be for the activities which they house. There are underground offices, offices with borrowed light only, offices in old buildings, ill-constructed, inconvenient, unventilated, and often undrained; offices so overcrowded that the atmosphere after a few hours is thick enough to cut with a knife. No doubt the high value of property has tended to bring about these results, but the question is whether they ought to be tolerated, having regard to the very large section of the population whose health is endangered. Parliament legislates freely for factories and workshops, for lodging-houses, for bakehouses, and for schools, why not for offices? The clerk and the typist have, after all, a great claim to consideration, and public opinion will be inclined to agree with Dr. Collingridge that it is a matter of regret that the Legislature does not furnish local authorities with more definite and efficient powers for remedying conditions in offices—conditions which in many cases must contribute largely to the spread of disease as well as to the depression of vital energy. We hear much of the need for housing reform nowadays; but the ends for which such reform is advocated can never be fully maintained as long as so many of the non-manual workers spend their working days in an environment that is thoroughly, and generally quite needlessly unhealthy. During the year under review 806 deaths were registered in the district, including 674 persons dying in the City but not belonging thereto. The deaths from phthisis correspond to a rate of 1.06 per 1,000 of the population, compared with 1.35 in the metropolis. The total death-rate for 1912 was 9.5 per 1,000 per annum of the population (the previous year being 10.9), whilst that for the whole of the metropolis was 13.6. Workers and residents alike in the City of London may have cause, therefore, to congratulate themselves upon the health of the great capital, which owes so much to the vigilance of its able Medical Officers of Health.

CURRENT TOPICS.

Speeding Up.

THE efficiency engineer has got a grip of the factories. He has drilled the operatives to eliminate so-called superfluous movements from their work and to employ only a purposive directness in the performance of the daily task. He was a great man, the joy of the capitalist and the workers' pride. Efficiency *in excelsis* was his motto, and a workman for him became, literally, a hand. Rectilinear ruthlessness was to oust the graceful curves of humanity in motion, regardless of the fact that it is physiologically imperative that muscles should not work by the shortest mathematical route. That is the difference between mankind and machinery. Only an untrained eye would deem the style and flourish we all associate with the efficient workman to be superfluous. It is during these graceful squanderings of time that the essential muscles observe a systole. If this infinitesimal liberty from labour is taken away fatigue develops fast and becomes permanent. The effect is decreased effectiveness. The speeding-up idea which has taken hold of our industries came from America, and even there it has lost its favour. The theory of the thing was wrong, and would have been obviously wrong to those who conceived it had they realised that a man is not a machine, but an animal.

Housing in Dublin.

DURING the past week the Lord Lieutenant and the Chief Secretary of Ireland received several important deputations to discuss the housing question, particularly as regards Dublin. The Women's National Health Association, the Dublin Citizens' Association, and the Housing and Town Planning Association, were among the bodies represented. One common demand was made by all the deputations that the Irish Government should appoint a Vice-Regal Commission to investigate and report on the whole matter. Public opinion in Ireland is unanimous on this point. Mr. Birrell, however, remains unconvinced. As we stated last week, he proposed in the first instance to appoint a Departmental Committee of the Local Government Board to make a private inquiry. He has been persuaded to modify this suggestion so far as the privacy of the inquiry is concerned, but he still regards a committee of the Local Government Board as a better instrument than a Vice-Regal Commission. His arguments in favour of this view are so weak that we feel compelled to think that he has not stated his real reasons. He refers to expense and delay. The expense of a Commission is not so formidable as Mr. Birrell suggests, and, considering the thousand and one purposes—more or less useless—for which Commissions are appointed, this objection does not carry much weight. To go no further: the importance of the subject is out of comparison greater than that referred to the Vice-Regal Commission on the Milk Supply which reported a few days ago. As to the delay occasioned by the appointment of a Commission, it would surely be better to proceed on a well-considered and complete scheme than to rush hastily into feverish activities. The reason for insisting on a public inquiry by independent men is easily stated. In stating it, we are not sure that we are not also stating the reason of Mr. Birrell's refusal. It is this. In so far as any public bodies can be held responsible for the deplorable condition of the health of Dublin, in which is included the housing of the working classes, two bodies must answer—the Dublin Corporation and the Local Government Board. They stand at the bar of public opinion, and they cannot at the same time occupy the bench.

The Predominant Prescription.

THE dead hand of the apothecary rests on us. He took something from a big box, and our patients still expect us to do the same. The lawyer gives advice, and even the rich he sends empty away; while the doctor is expected to part with drugs or their equivalent prescription. Our patient wants a portable instrument for obtaining a potable ingestion, and if he does not get it he is dissatisfied. The idea of a charm or amulet still survives to keep medicine a mystery. Every layman believes in the transferability of therapeusis to the extent of the omnipotence of "a good prescription." He does not yet see that the paper the doctor leaves behind him is not so important as the knowledge which he takes away. Facts and opinions in a case book are the valuable part of a professional visit, and as soon as this is really known the quack's day is over. Anyone can hand out remedies, but no one but a competent practitioner can extract the full knowledge of a case. The prescribing chemist could not use the information if he had it, and the real *mala fide* quack has no use for it whatever. What he wants to know is his victim's income.

Municipal Control of Lying in Institutions.

A RESOLUTION, unanimously adopted at a recent meeting of the London County Council, registers a public movement of no little importance. It pledged that body to apply next year for legislation conferring further powers in the control of all hospitals, other than poor-law institutions, and of premises used for lying-in purposes. It is asked that all such places be registered with right of entry of officers and of granting or of withdrawing licences. There is much to be said in favour of such a proposal, inasmuch as it protects the health of parturient women on the one hand, and strengthens the hands of the authorities, on the other hand, in dealing with a subtle and widespread branch of criminal activity. In spite of these obvious advantages, however, the legislation thus proposed deserves most careful attention, for it introduces the thin end of the wedge of State hospital service. If the principle be conceded in the case of the lying-in institutions, it can hardly be denied in the case of institutions devoted to other branches of medical practice. It by no means follows that if the London County Council had control of lying-in houses it would necessarily be able to keep them up to first-rate administrative pitch. A larger and more powerful body, to wit, the Local Government Board, although backed by the resources of the Government and governed by a man of exceptional strength of character, is by no means able to enforce high standards in Poor Law Infirmaries. Recently, the Board has shown itself impotent as dealing with so simple a case as an epidemic of enteritis in a Poor Law Infirmary said to be caused by a local filth deposit. The voluntary hospital system, whatever its faults, has of late years undergone a marvellous phase of evolution. It is open to question whether collective public enterprise can do better. It is to be hoped, at any rate, that the matter will be well threshed out before Parliament sets the seal to any hasty socialistic measures.

The Milk Supply of Ireland.

The Vice-Regal Commission on the Irish Milk Supply presented a unanimous report last week, which contains several recommendations of interest. As regards the alleged scarcity of milk there is apparently no scarcity in the larger towns, and only a slight seasonal scarcity in the smaller towns. In some rural districts there is a genuine scarcity sufficient to affect the health of the people, the scarcity being due in all probability to all the milk being sent to a creamery. The suggestion for the use of separated milk as a food is not likely to be welcomed. In regard to the purity of the public milk supply, the Commission recommends that the public health authority should have extended powers in regard to dairies suspected of conveying diphtheria or typhoid. It is suggested that the authority should be empowered to take the necessary steps to ascertain the presence of a "carrier" in the family or employment of the milk seller. Moreover, it should be possible to order the closure of a dairy on epidemiological evidence alone. We give a brief summary of the report elsewhere.

PERSONAL.

H.M. the King has been graciously pleased to approve the appointment of Surg.-Gen. A. T. Sloggett, C.B., C.M.G., K.H.S., to be Director-General Army Medical Service, in succession to Surgeon-General Sir Launcelotte Gubbins, K.C.B., M.V.O., M.B., K.H.S., when the latter vacates the appointment.

Dr. J. Murray Bligh has been appointed Lecturer in Clinical Medicine in the University of Liverpool.

Dr. F. G. Wrigley, M.D.Vict., has been appointed Honorary Assistant Surgeon to the Manchester Ear Hospital.

The annual dinner of the Huddersfield Medical Society took place the other day under the chairmanship of Dr. D. Lewis Cairns.

Mr. W. Bernard Secretan, M.B.Lond., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Royal Berks Hospital, Reading.

Sir Arbuthnot Lane left London on Saturday last for the United States to give several addresses, and will return to London on December 7th.

Mr. E. Arthur Dorrell, F.R.C.S.Eng., has been appointed Assistant Ophthalmic Surgeon to the Prince of Wales's General Hospital, Tottenham, N.

Dr. Sanderson Long presided over the annual dinner of the York Medical Society last week, and the Orator for the year was Mr. Stephen Paget.

Dr. P. E. Walton-Smith, M.B.Syd., M.R.C.P. Lond., has been appointed Honorary Physician to the Royal Prince Alfred Hospital, Sydney, New South Wales.

We regret to learn, as we go to press, of the serious illness of Sir Donald MacAlister, Principal of Glasgow University. Our readers will join with us in wishing him a speedy recovery.

Dr. Arthur Rotherham, M.A., M.B., B.C., Medical Superintendent of the Darenth Asylum, has been appointed a Commissioner (paid) under the Mental Deficiency Act, 1913.

Dr. J. H. Yolland, County Director of the British Red Cross Society for the Bromley (Kent) Division, was the recipient of a suitable presentation the other day in recognition of his services.

Dr. C. A. Mercier will deliver the FitzPatrick Lectures at the Royal College of Physicians of London on Thursday, November 6th, and Tuesday, November 11th, on "Astrology in Medicine."

The annual dinner of the Bristol Medical School will take place on Tuesday, November 18th, 1913, at 7 for 7.30, under the Presidency of Dr. P. Watson-Williams. Sir Felix Semon, K.C.V.O., will be the guest of the evening.

Dr. F. W. Mott, F.R.S., will deliver an address on "The Degeneration of the Neuron in the Light of Recent Research," at the inaugural meeting of the Midland Medical Society, to be held at the Grand Hotel, Colmore Row, Birmingham, on Thursday evening, November 13th.

Dr. and Lady Philippa Stewart are to be presented by the Conservatives of East Grinstead with a piece of antique silver plate and an illuminated album containing the names of some 700 subscribers, as a silver wedding gift. Lord Colchester will make the presentation early in the present month.

Professor F. H. Edgeworth, B.A., M.D.Cantab., D.Sc.Lond., will deliver the eighth Long Fox Lecture in the University of Bristol on Tuesday, November 18th, at 4.30 p.m., on "The Cranial Nerves: Their Motor Nuclei and Muscle Sensory Fibres." Sir Isambard Owen, the Vice-Chancellor, will preside.

Sir William Collins, M.D., F.R.C.S., was entertained at dinner last week at the Café Royal by the house surgeons, registrars, and anæsthetists who have held office at the London Temperance Hospital during the 25 years that Sir William has been Visiting Surgeon to that institution, and a presentation was made to him by his former colleagues.

Sir George T. Beatson, M.D., K.C.B., was the recipient last week of a handsome presentation from the Superintendent and past Assistants and House Surgeons of the Western Infirmary, Glasgow, as an expression of their high appreciation of his services on the occasion of his retirement from the active staff, and his appointment to the honorary consulting staff of the institution.

Speaking at the annual dinner of the London School of Tropical Medicine on October 24th, presided over by Dr. F. M. Sandwith, Mr. Austen Chamberlain, M.P., said that the committee of which he was chairman set out to obtain £100,000 for the endowment and support of tropical medicine. They had not succeeded in this endeavour, but had obtained the not inconsiderable sum of over £70,000.

FRENCH CLINICAL LECTURE
ON
IS IT NECESSARY TO OPERATE IN SPINA BIFIDA?

By Dr. FROELICH,
Professeur Agrege in the Faculty of Medicine, Nancy

[Specially Reported for this Journal.]

Notwithstanding the great number of the publications inspired by spina bifida, surgeons are still far from a state of unanimity regarding the opportunity of intervention in cases of this congenital malformation of the spinal column, and the question of the most favourable time for operation. In order to arrive at a judgment in the matter of each of those questions, it is necessary to have at one's disposition observations that have been carried out during a great number of years, and to be able to examine without undue haste the respective series: on the one hand, of patients with exactly corresponding lesions who have been subjected to operation; and, on the other hand, of patients on whom no such procedure has been carried out.

The question has been discussed on the occasion of the recent communications to the Société de Chirurgie that were made by Rouville and by Delagéniere. MM. Kirmisson, Savariaud, Broca, Périer, and Walther took part in that discussion. But no well-defined conclusion has been arrived at as a result of those debates. In the following sentences, I purpose limiting my documentary evidence to the record of a certain number of personal observations made without interruption during fourteen years or so. I shall endeavour to extract from these the teachings which they convey. As all the observations that I am about to reproduce have already been published by myself or by my pupils, I may be permitted to sketch them very briefly.

Obs. 1.—In Froelich, *Etudes de Chirurgie interne*, Paris, 1905.—Male infant of eleven months, presenting lumbar spina bifida of size of fist; skin normal at base of tumour, but cicatricial and translucent over the summit, which is bilobar. No paralytic symptoms. The tumour is partially reducible. Operation, in 1898. Cure. Seen again in July, 1904, and presented at the Société de Médecine of Nancy. A perfect cure. Again in 1910, when the boy was 12 years old; on the left side the foot had developed equino-varus.

Obs. 2 (*Ibid.*, p. 81).—A young man, æt. 22. At the time of birth he was found to be affected with spina bifida, in the lumbar region; the tumour was soft, but irreducible, and of the size of a large nut. The contents were translucent. No treatment was adopted. Talipes equinus developed on the right side. When seen by us, at the age of 22, this deformity was very pronounced, with slight inclination to valgus; there was no trophic trouble. In the spinal region, there was a trilobar tumour at the level of the second lumbar vertebra, the base of which was surrounded by a collarette of long hairs. The consistence of the tumour was hard—fibro-lipomatous.

Obs. 3 (Thèse Martin, Nancy, 1912).—Boy, æt. 13. Affected from time of birth with spina bifida of the lumbo-sacral region; tumour of size of an egg; non-reducible; covered throughout with healthy skin. Movements of lower limbs normal. Extirpation of tumour at the age of six weeks. Healing by first intention. Histological examination revealed no neural tissues in the contents. The infant continued healthy till the age of 4. At that date, talipes equino-varus developed on both sides; and, soon after, incontinence of urine and fæces. At the age of 6, the clubbed feet were treated in the clinique of Dr. Kirmisson. At present date, the boy is 13 years old; the equino-varus is highly developed on both sides; there is also genu valgum. On the right ischium, a deep perforating ulcer. Incontinence of urine and fæces. Hypertrophic phimosis. The genu valgum was treated by apparatus; tarsectomy was performed for the clubbed feet. The phimosis was disposed of by excision. The lad is now able to walk with a cane.

Obs. 4 (*Revue Médicale de l'Est*, 1911).—A girl, æt. 10. Had been born with lumbar spina bifida, situated at the level of the second and third vertebræ; tumour of size of mandarine, and covered with healthy skin. No intervention was adopted. Seen in October, 1910. On the right side there exists a slight equino-varus, and a perforating ulcer beneath the metatarso-phalangeal articulation of the great toe. There was also slight incontinence of urine. The perforating ulcer healed after erasion, followed by three weeks' rest; the equino-varus was subjected to forcible reduction, after healing of the ulcer.

Obs. 5 (unpublished).—A lad, æt. 16, was sent us by Dr. Guyon, of Remiremont, on April 14th, 1908. At birth, a tumour of the size of half a chestnut was found at the base of the sacrum. No treatment was adopted. During the previous period of four years, the left foot had gradually developed equino-varus; there is limping gait, and incontinence of urine. On examination we found shortening of the left leg, by 3 c.c.; there is equino-varus; there had been on the same foot a sixth toe, which was removed when æt. 1. In the sacral region, there was a tumour of triangular outline—apex pointing downwards. The base was limited by a deep cutaneous furrow, and was garnished with a collarette of long hairs. The skin over the tumour was normal in appearance. The tumour itself was reducible. Between the skin and the reducible contents, a hard, fibrous *plaque* was interposed.

Such are our former observations of spina bifida. We shall now append our integrated statistics, in the endeavour to estimate the relative proportion of the operative mortality: that of operation and of non-intervention. Of fourteen children operated on by us, since 1898, during the early weeks following birth, five died a few days after the operation of broncho-pneumonia or of convulsions; four others succumbed in the course of the first year, two from the co-existing hydrocephalus, and two from progressive gangrene of the digits; the other five still survive, after the respective intervals of thirteen years and two years (*Obs.* 1 and 3); without hydrocephalus, but with motor troubles and incompetence of sphincters, slight or grave; of the remaining three, which have been operated on within the past two years, two are affected with hydrocephalus.

Of the seven children who had not been subjected to operation, three are still living (*Obs.* 2, 4 and 5) after respective intervals of 22, 11, and 16 years; two others are also still living, but are only 3 years old. One of these has progressive hydrocephalus; the other is in good condition, as regards cranial ossification and motility, but the tumour has not disappeared; two have died—one succumbed to digestive troubles, the other of rupture of the tumour preceded by convulsions. In the latter there had co-existed—in addition to hydrocephalus—complete paralysis of the lower limbs.

If we now regard but our twenty-one personal observations, we find that the operative mortality is 64 per cent.; while that of the subjects of expectant treatment was but about 29 per cent. It must, however, be noted that it was only the more favourable cases that were treated by the expectant method; the cases in which the tumour was inverted by resistant membranes, and had displayed no rapid increase of growth; while, on the other hand, operation had been adopted in the worst cases only—those in which the membranes were on the point of rupture, or had already become partially gangrenous, or even perforated. Nevertheless, the mortality remains a very high one, and the operative results are but little gratifying; and such is the experience of all surgeons who have had long experience of the surgery of infancy (Kirmisson, Broca).

The ultimate prognosis depends, as we have already said, on the contents of the tumour. That is evident. But it is not necessary that one should allow himself to be influenced too far, and give a prognosis too favourable in consequence of a negative histological examination. In our *Observations* 1 and 3, the tumours seemed to be pure meningoceles, as the tissues excised with the tumour were of fibrous structure. Nevertheless, in *Obs.* 1, medullary phenomena supervened after a period of ten years, in form of an equinovarus; and in *Obs.* 3, after four years, corresponding deformities of the feet supervened, with incontinence of urine and fæces superadded.

The explanation of those tardy spinal changes may be sought, perhaps, in adhesion of the meninges and nerve filaments to the rachidian orifice. When the patient grows up, as there is no correlation between the elongation of the spinal canal and that of the spinal cord, the latter becomes dragged-on; and paralysis of the lower limbs, and trophic disturbances, begin to appear. Nor should we forget that Lannelongue had already advanced the view, in the thesis of Dubreuil (Paris, 1902), that the formation of the tumour in spina bifida is but a secondary fact; defective evolution of the spinal cord being the primary one. The same observation harmonises with certain of the phenomena of spina bifida occulta. Furthermore, we have met with three children for whose cases we were consulted between the tenth and thirteenth year; for deviations of the feet which had developed tardily and progressively. Talipes varus existed in each of the three cases. In two of them there were slight trophic troubles in the plane of the ball of the great toe and of the calf; where red patches appeared and some points of ulceration developed. On examination of the vertebral column, we did not, at first, notice any modification of the integument; but on palpation, there was discovered, at the lower extremity of the lumbar column, an opening of the rachidian arches, which permitted the introduction of the finger; and of which the compression caused pronounced pain. Absence of the posterior arch of the fifth lumbar vertebra was easily verified by radiography.

In those three cases (spina bifida occulta of very slight development) there was no tumour, no hypertrichosis; merely a hiatus in one of the posterior arches of the spinal column. Nevertheless there was supervention of paralytic and trophic troubles. Is the cause, as in the cases of true spina bifida, a primary malformation of the spinal medulla, with retarded manifestations?—or, are these due to adhesions, consequent on the vertebral dehiscence of the osseous structures, between the bones and the membranes of the cord, and the consequent dragging of the latter at the period of increased growth?—or is it that the solution of vertebral continuity exposes the neural structures to ready traumatisms? All those hypotheses are respectively possible. With such restrictions, it is certain that the best operative results are to be anticipated in presence of a meningocele or myelocystocele; tumours in which the integuments are often undamaged, and the portions of the nervous system therein contained are of relatively little importance and easily reducible within the spinal canal after extirpation of the fluid capsule. But, on the other hand, in cases of myelo-meningocele, with its characteristic aspect of a tricolour cockade, enclosing nearly all the nerve structures destined for the supply of the lower limbs, operative procedure carries with it the risk of a deplorable result. Nevertheless, in two of the cases of children which were presented in conditions sufficiently unfavourable, the complete extirpation of the sac did not in any way diminish the motility of the limbs during the whole period of survival. This fact would indicate that a sufficient supply of nerve structures had remained within the canal to guarantee the innervation of the lower limbs. Such innocuity of the main nerve trunks in cases of spina bifida has already been indicated by Denucé and Piéchaud, in their "Précis de Chirurgie Infantile."

The anatomical investigation of spina bifida has been carried out in the most perfect manner by Professor Muscatillo (of Catania), and by Professor Denucé (of Bordeaux). And, most recent of all, the "Traité de Chirurgie," of Le Dentu and Delbet has displayed with much discrimination the anatomy and surgery of hydrorachis. Our personal observations go to prove that spina bifida is a grave lesion, whatever may be the anatomical aspect in which it presents itself—meningocele, myelocystocele, or myelomeningocele—from the fact of the great mortality which it occasions, whether the affected children undergo operation or not. Among the children who survive—whether the course adopted be that of operation or expectation—a great number, if not all, will gradually present, after the lapse of ten or twelve years, motor troubles in the lower limbs, paralyses of the sphincters and trophic ulcerations (talipes equino-varus, perforating ulcer). And the children who have not been subjected to operation appear to present those tardy developments in degree not less intense than those who have been.

Our conclusion accordingly is that: operation should not be carried out, whatever may be the anatomical formation of the spina bifida, except in those cases in which operative procedure is necessitated by a rapid increase in growth of the tumour, by imminent rupture, or by the appearance of patches of ulceration on the surface. In all other cases, we should await developments, while protecting the tumour with an appropriate apparatus.

In an article which recently appeared in the *Archives de Chirurgie* (October 25th, 1912), inspired by Professor Jeannel of Toulouse, and written by MM. Tournier and Ducuing, the subject of dealing with spina bifida of old standing is discussed; and conceptions are displayed which correspond, for the most part, to those which we have just indicated. The authors affirm, however, that "every case of old-standing spina bifida should be operated on, when displaying recent complications." I feel myself unable to subscribe to this precept; and, indeed, the two observations which are offered in support of the view are by no means convincing. Operation, at most, can have but the effect of aggravating the motor lesions and those of the sphincters. And, with regard to scars and perforating ulcers: these are readily and rapidly curable by the methods of local treatment, aided by rest and appropriate dressings, as we have frequently had the opportunity of proving.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Sir Arbuthnot Lane, Bart., M.S.Lond., F.R.C.S. Subject: "Chronic Intestinal Stasis."*

ORIGINAL PAPERS.

POST-OPERATIVE INTESTINAL STASIS AND THE INTRA-ABDOMINAL USE OF OIL (a)

By WATERS F. BURROWS, M.D.,
New York.

SINCE my subject has reference to a post-operative abnormality, it is interesting to note that much has been accomplished in hastening convalescence and eliminating the discomforts and complications of the surgical patient by permitting early post-operative freedom of movement and through placing of the patient in the partial or complete sitting posture after the administration of a general anæsthetic. The abdominal case operated upon without delay, returned to a bed raised 18 to 24 inches at the head, permitted to move from side to side and sit upright in bed upon the second or third day, convalesces rapidly and, more important, avoids such complications as embolism, thrombosis, pneumonia, and difficult micturition, with its dangers of cystitis, when catheterisation is required. Intestinal functioning is likewise bettered, there is less inhibition of peristalsis, and evacuations occur sooner; yet frequently intestinal disturbance is shown by a coated tongue, loss of appetite, abdominal distension and pain, while excessive vomiting and inability to easily pass gas or bowel contents by rectum emphasises the fact that there are other important considerations.

Referring, in this communication, not to the cases with more or less complete inhibition of intestinal peristaltic activity, such as is present in advanced peritonitis, nor to those where there exists an obstruction, dependent upon adhesions, kinks, exudates, rupture of the operative wound, or accidental constrictions of the gut caused at operation, but to the more common ones, with less interference with the fæcal current, seen after many abdominal surgical procedures, it is evident that the last are associated with a regional or segmental gut spasm. There is present a form of intestinal obstruction, accompanied by its usual signs, vomiting, some abdominal distension and inability to readily pass bowel matter and gas. The bile-stained, continued and often excessive vomiting is not fully accounted for by the gastritis resulting from the anæsthetic. The comparative rarity of true fæcal vomiting indicates the evanescence of the obstruction, which seldom exists long enough or to the extent necessary to cause regurgitation from the ileal loops. Fæcal vomiting, however, does occur in this condition, may be mistaken for acute gastric dilatation, and overcome without the necessity of secondary operation, required when some mechanical ætiological factor is present. Acute abdominal pain develops, dependent upon intestinal spasm and œdema, while proximal to the gut involved increased peristalsis occurs. Accumulation of gas follows when obstruction is unrelieved or spreading peritonitis is present, and meteorism may become extreme, indicating over-distension and relaxation of the intestinal musculature, and a congested, sluggish circulation, conditions favourable to the spread of intra-abdominal inflammation. Pain then becomes much decreased on account of the septic condition which supervenes and from discontinuance of muscular spasm. In its place there is the distress which results from encroachment of abdominal viscera and diaphragm upon the thoracic cavity, breathing becomes more difficult, and interference with heart action increases its irregularity and adds to the abdominal vascular disturbance. Associated with the condition there is always more or less irregular peristalsis, distension, and incomplete evacuation of the colon and rectum, which to some extent explains the beneficial results of an effectual stimulating enema. However, the expulsion of gas, following a rectal irrigation is not in itself as important as the reflex, activating effects which a successful colonic stimulation exerts upon the rest of the intestinal tract, causing a return to normal, uninterrupted, wave-like peristaltic contractions.

The small intestine is usually the site of the abnormality, as is shown by the diffuse character of the pain and distension, when present, which are not typically colonic. With distension of the colon pain is never so severe, or only becomes so when, with obstruction, the small bowel distends secondarily; it is more definitely located, either in the sigmoid, most frequently, cæcum or other portion, and the "ballooning" is most marked in the transverse colon, above the level of the umbilicus. Moreover, that the small bowel, not the large, is involved, is clinically demonstrated by the frequency of serious excessive vomiting and severe abdominal pain following operative procedures upon the small intestines or in the upper abdomen, where they are more exposed to irritation during operation than in either pelvic or iliac regions. In the lower animals, the dog in particular, the small gut contracts violently and becomes a stiffened spastic tube upon even moderate irritation, whereas the rectum and large bowel are less perceptibly affected.

(a) Paper read in the Section of Surgery, before the International Congress of Medicine, London, August, 1913.

During the early stage of post-operative intestinal stasis the prognosis for spontaneous return of normal peristalsis is good, relief is affordable, and suitable measures favour the propulsion and evacuation of intestinal contents, but with the advent of distension, following a primary period of spasm and pain, the condition present has, almost without exception, passed what might be termed an exaggerated physiological stage, has become pathological and demands secondary operation. In the aged, following operations where large intra-abdominal growths have been removed, and where a relaxed belly wall exists, there may occur, in the absence of actual obstruction, a degree of distension post-operatively which is not usual. In these instances there is the distress caused by pressure upon the respiratory and circulatory organs in the thorax, but absence of severe abdominal pain. The condition is one of intestinal atony, associated with deficient intra-abdominal pressure; the danger is less, and with stimulation, especially the use of strychnine, atropine, enemata, and extra-abdominal pressure, intestinal activity is regained.

The Treatment of Intestinal Stasis and Spasm consists in resorting to rectal enemata, containing soap, turpentine, alum, castor oil, glycerine, magnesium sulphate, etc., in combination or singly, or the use of large, continuous, saline rectal irrigations, with or without essence of peppermint, added. Strychnine aids the weakened patient; atropine, in large doses, inhibits abnormal spasticity; turpentine stupes and mustard paste, applied to the abdomen reflexly, favour return of normal peristalsis; and the rectal tube left in place for the escape of gas, and stomach lavage, may both be effectual. Eserine, theoretically contra-indicated, is often used to overcome an intestinal atony, erroneously believed present, while "hormonal," acting similarly and more powerfully upon a bowel already in spasm, is consequently additionally distressing and ineffectual in producing results in the worst cases. Attempts through enterotomy to empty the gut of its contents, with failure to eliminate the cause of obstruction, is attended with almost universal disaster. The position of the patient, lying upon the side, especially the right, is often a means of affording relief, and the partial sitting posture, drinking of fluids, and early taking of solid food conserve energy and hasten recovery. Morphine is indicated in many instances, not only controlling pain, but, through relaxing the spastic gut, aids intestinal propulsion.

The pain, disturbance, and actual dangers resulting from post-operative bowel stasis make evident the importance of prophylaxis. Not only are the means used to remedy the condition largely symptomatic and only partially effective, but some of them are in themselves attended with discomfort, and often repeated procedures, each adding to the patient's fatigue, are required before a normal condition is restored. All attempts at prophylaxis depend upon recognition of the causes of post-operative stasis, and these may be classified as follows:—

1. Irritation of the intestinal musculature or peritoneum, resulting in spasm and obstruction at the site of excitation, with consequent increased peristalsis and accumulation of intestinal contents proximally, and in a reflex contraction at other susceptible portions of the alimentary canal.

2. A secondary circulatory engorgement, which prevents the absorption of the gas and renders peritoneal and other tissues less resistant to spreading infection.

3. The restoration of intestines to non-anatomical positions and the oversight, at operation, of kinking or prolapse.

4. Abrasions of the visceral peritoneum, followed by adhesions sufficient to cause angulation or to retain a displaced bowel in abnormal position.

To avoid intestinal irritation at operation, it is important to have large or easily enlarged incisions, to minimise the use of foreign substances, such as sponges and pads, within the abdominal cavity, relying instead upon posture of the patient, to manipulate the gut, when required, with a gloved hand, to avoid infection and exposure of intra-abdominal parts to the drying effects of air or to all but body temperatures, failing which congestion follows (consequently as little evisceration as is feasible), to eliminate from the operating-room all irritating solutions in bulk, such as plain water, bichloride of mercury solution and alcohol, which upon the hands might gain entrance to the belly, and to exclude the use of all chemicals, such as phenol or iodine, employing instead the actual cautery, the effects of which are controllable.

Evisceration and faulty replacement of intestinal coils or displacement and angulation, following operative procedures, are frequent sources of unrecognisable mild intestinal obstruction. Concerning the position of small intestines, Mall says, "The jejunum first arranged itself into two distinct groups of loops situated well up in the left hypochondriac region. Each group made more than a complete circle and both of them came in contact with the anterior abdominal wall. After this the intestine passes through the umbilical region to the right side of the body. Then the intestine recrosses the median line to make a few convolutions in the left iliac fossa, after which it fills the pelvis and lower abdominal cavities between the psoas muscles." To a great extent misplaced intestines and purely mechanical disturbances will be restored, after operation, to normal position and overcome by physiological shifting, of which the gut is capable. However, with any abdominal distension or in the presence of fresh adhesions this is made more difficult or impossible. Likewise an omentum, placed in malposition or spread out and pulled down into the lower abdomen, always tends to regain its natural position, carrying with it and kinking coils of intestine to which it may have adhered, or, becoming involved in the inflammatory process, it may press upon or constrict the intestinal lumen. Mechanical obstruction may have origin, moreover, in a mobile, prolapsed cæcum, ileal kink (Lane) ptotic colon, or voluminous sigmoid, all of which portions of gut should be inspected, when practicable, during operation.

The Value of Mineral Oil in Intestinal Stasis.

Abrasion of the peritoneal surface of the gut is a most common and, frequently, unavoidable cause of post-operative intestinal stasis. The method of overcoming the effects of this traumatism by means of mineral oil, introduced within the abdominal cavity at operation, has proved effectual and safe. Wilkie concluded that sterile vaseline oil could be used intra-abdominally in suitable cases without danger, that it was of value in mopping over denuded surfaces in operations for peritoneal adhesions; Crump used similarly an oily animal extract, and others, including Blake, Seuffert, Hirschel, Krecke, and Kolb, resorted to plain or camphorated oil to combat peritonitis. The advantages of using neutral oil intra-abdominally was more fully demonstrated, however, in the following case, where a larger amount of mineral oil was used than had ever before been resorted to or thought desirable, so far as a research of the literature upon the subject indicates.

A patient, a woman æt. 32, was operated upon early in January, 1913, for the relief of obstinate constipation and cæcal distress; volvulus of the cæcum was found and appendectomy and cæcopexy performed. The patient left the hospital upon the seventh day, and for a few days the bowel evacuations were natural, but a certain amount of "gas" pain and attacks simulating increased peristalsis now occurred. The pain became severe at the pyloric region and was associated with vomiting which gave temporary relief. Upon each of the twelfth, thirteenth, and fourteenth days vomiting occurred three or four times, and pain, coming at intervals, was controlled by lavage. Upon the fifteenth day vomiting became more frequent, occurring every two or three hours, colicky pains became severe, and enemata resulted in the passage of a little gas and particles of fæces. The temperature, which had been normal, rose to $100\frac{1}{2}^\circ$ at 4 p.m., the pulse remained under 90, but considerable general abdominal distension appeared. Two hours later, at secondary operation, coils of small intestine, beginning at a point about one foot from the ileo-cæcal valve, lying to the left of the mesentery and filling the pelvis, were found matted together with extensive, fresh, soft adhesions, sufficiently firm to cause acute angulation in three places, and constriction in others. Upon separating them, which was done by blunt dissection, areas of peritoneum were torn off, and denuded portions of gut, aggregating approximately 10 square inches, remained It was found necessary to break down adhesions at about twelve places, involving perhaps 8 ft. of bowel. The site of absolute obstruction was near the cæcum, the intestine distal was collapsed, that proximal greatly distended, but as usual it was the jejunum which suffered most in this respect. This part of the gut for 3 ft. was distended to double its normal, black, but still presenting a glistening peritoneal surface. The peritoneum ruptured in several places upon putting back the jejunum, evisceration having been required, its walls were so thinned out and tense that sutures would not hold, and attempts in this direction were soon abandoned. Six ounces of liquid petrolatum or mineral oil were sterilised, poured into the abdominal cavity and spunged over the coils of intestine. Approximately five ounces of oil were left within the abdomen, the fluid welling up into the wound upon closing the belly wall. Convalescence was uneventful except for the occurrence of an extensive urticaria and temperature of 102° upon the fifth day, the temperature remaining at other times under 101° F. The pulse-rate, after leaving the table, was 128, but soon dropped to below 100; no vomiting followed operation, nor did "gas" pains, other than low colonic ones, relieved at once by rectal irrigation, reappear; but as a precaution cathartics were given early and persisted with for three weeks. The patient again left the hospital before the completion of a full seven days.

The writer has carried out a series of animal experiments showing the harmlessness and value of neutral mineral oil, used intra-abdominally. In most simple abdominal operations its use is not required, since prophylactic care will limit post-operative distress, but in all others the oil is of the greatest value when employed upon abdominal pads, during operation, or sponged gently upon intestinal coils, previous to closure of the incision, excluding only areas where adhesions are desired, and having care that all plastic procedures and intestinal anastomoses are completed before oil is introduced. In cases presenting extensive adhesions, or widespread peritonitis, large amounts of oil (up to 6 or 8 ounces) are required to prevent recurrence or formation of adhesions, to limit the absorption of toxines from the peritoneal cavity, to assist nature in combating the infection, and as a prophylaxis against intestinal stagnation, obstruction, spasm, and final paresis. In the case of more than moderate severity, intestinal spasm and stasis, together with abdominal pain, are largely eliminated and convalescence is made more comfortable and safe, while the individual in dire straits, at the time of surgical interference, has, post-operatively, manifoldly better chances of recovery.

Conclusions, based upon the peritoneal reaction to chemical irritation and upon the results of using neutral oil intra-abdominally to control infection and effects of traumatism, both mechanical and chemical, as observed in guinea-pigs and dogs (a) are as follows:

1. Iodine, mercuric chloride solution, carbolic acid, alcohol, etc., applied to the peritoneum, rapidly spread beyond the area intended, through capillary action and affinity for the tissues, destroy the endothelial cells, cause an excessive exudate, and tend to produce permanent adhesions.

2. Olive oil, containing fatty acids, and commercial liquid petrolatum, the impurities of which are acids, resins, fats, and oils, both animal and vegetable, combining irritating substances with a bland oil, produce inflammation of intact peritoneal surfaces, as is shown by the occurrence of a watery hemorrhagic exudate, which differs, however, from that which takes place in the absence of oil, in that agglutination and organisation do not follow.

3. Bland, non-irritating oil, represented by purified liquid petrolatum obtained from Russian oil, causes none of the changes occurring in the process of adhesion formation, which are endothelial cell injury, coagulable exudate, agglutination, organisation, and finally connective tissue and fibrous scar prodution. The oil has no appreciable chemical action upon the tissues, nor deleterious effect upon the animal, and is slowly absorbed.

4. Oil, used intra-abdominally in sufficient quantity, prevents, to a great extent, the formation or recurrence of adhesions.

5. Oil fills the lymphatic channels leading from spaces denuded of peritoneum or opened by incision, thus limiting septic absorption, and, through preserving the endothelial cells, prevents extension of destructive processes.

In his lecture before the Royal Society of Medicine last week, Professor Elliott Smith stated that during his experience in Egypt he had examined 20,000 bodies. Some of the prehistoric bodies dating back 60 centuries were in a marvellous state of preservation, and even bloodstains could still be seen. He had discovered splints which went back to the time of the Pyramids. In the earliest cemetery ever excavated in Egypt they found that all the men had been circumcised.

(a) Experimental studies carried out, through the courtesy of Dr. S. P. Beebe, at the Loornis Laboratory, Cornell University Medical School.

SOME OF THE PSYCHOLOGICAL AND CLINICAL ASPECTS OF ALCOHOL. (*a*)

By SIR THOMAS CLOUSTON, M.D., LL.D.,

Author of "Clinical Lectures on Mental Diseases," "The Hygiene of the Mind," "Unsoundness of Mind," etc.

In tackling the psychology of alcohol, one of the first questions that occur to the medico-psychologist is a historical one—What has been the effect of alcohol on the brains, mind, and conduct of the men who in their lives have exhibited the supreme qualities of human nature? Though this particular point has not come out in all the biographies of such men, profuse as have been the details related in their Lives, yet we know enough to form reasonably correct conclusions in the case of some of them. Taking Alexander the Great, Socrates, Moses, Solon, Julius Cæsar, St. Paul, Mahomet, Francis Bacon, Shakespeare, Goethe, Napoleon Bonaparte, and Darwin—those men being of different races, living in different ages of the world, all strongly influencing its history, and certainly representing the best that evolution has been able to do for men. Alcohol was known to all of them, and was in common use in their time. None of them except Mahomet abstained from its use, and none but he laid down any definite rules against it. St. Paul included drunkenness among his seventeen deadly "works of the flesh" which debarred men from the Kingdom of Heaven, but he enjoined its medical use to Timothy. Even Jesus Christ converted water into wine in order to add to the happiness of a small company of Jews, in accordance with a social custom of the time. He seems to have used wine in His daily life, for He said at the Last Supper: "I will not drink *henceforth* of the fruit of the vine." We cannot say that much guidance can be obtained from any of these in regard to the moderate use of alcohol. Solomon certainly spoke with two voices in regard to it.

The difference in the effects of alcohol on the two sexes is very great. Less alcohol will show bad effects on the brain of the average woman far sooner than in that of the average man. The woman seems not to have so commonly the kind of craving that men have for either alcohol or tobacco; but when they do come under the influence of the stronger liquors, a craving is set up which is more uncontrollable and difficult to deal with than it is in the average man. When many women take to the stronger drinks, it has a far more generally demoralising and disastrous effect on the whole social organism. In this respect the woman's brain in civilised countries is like the brain of the primitive peoples.

When we analyse the psychological effects of alcohol, we find that the first effect in the average human being—to which, however, there are many individual exceptions—is to accentuate the feeling of organic satisfaction. It produces happiness of a certain lower and bodily kind, analogous to that of a full meal It also accentuates the common social pleasures of intercourse with one's kind. It increases the gregarious tendencies of man. It tends to dull feelings of responsibility, of worry, of insistent duty, and of a serious view of life. It diminishes the tendency to take trouble about things. Looking to the pure emotions and higher pleasures of love, idealism, filial and parental affection, it undoubtedly tends to put those on a lower plane, diminishing their ideals.

Looking to the reasoning power—I am still speaking of the effects of a moderate amount of alcohol circulating in the brain—it cannot be said in any way to increase a man's power of coming to right conclusions from facts or to strengthen any form of reasoning whatever. It does, to begin with, seem to increase the power of endurance of irritations and hardships, and to diminish the sense of intellectual fatigue; but I believe that this is transitory, and does not last long enough to pay for its being so employed for such purposes.

Taking the virtue of courage, which is partly a mental and partly a bodily quality, alcohol may undoubtedly increase it; but it does so by diminishing the rational fear of consequences and lessening those protective instincts of which fear and even cowardice are expressions. It produces a sort of "Dutch courage." Undoubtedly it has been the custom in many nations to give alcohol to their soldiers on the eve of a battle, and probably that produces a greater willingness to a rash exposure of their lives.

Analysing next the effect of alcohol on the great human quality of imagination, does the stimulation of the brain by alcohol increase this wondrous faculty, or does it not? is a question of the profoundest importance to all civilised peoples. Human opinion has been divided on the subject from the earliest times. Many of the very great artists and the creators of literature and song have maintained its real stimulating power.

There is one great gift which only great men have possessed, and not all of them—that is, the gift of oratory—needing a large power of speech, a perfect choice of words, a high imagination, an influence for the persuasion of others, and intense feeling, all combined. Fox and Pitt undoubtedly depended, probably far too much, for the transitory power to make great speeches, on wine. John Bright, the greatest political orator of modern times, did not do so. Gladstone did not do so. Other modern orators are much belied if they did not resort partly to the stimulus of wine when they were to deliver a great speech. It may very well be that alcohol may stimulate a great orator for a great effort, but it is certain that constant resort to such a stimulus is an extremely dangerous thing both to his oratory and to his future length of life; but in this, as in everything else with which alcohol has action, much depends on the innate and hereditary qualities of the brain.

The faculty of memory cannot be said to be in any way stimulated by alcohol; on the contrary, it tends always to be obscured and made less accurate.

The power of attention is a faculty which many psychologists have carefully studied of late years. It relates to the action of the special senses, and the manner in which the impressions from them become a part of the mental furniture. Without attention there would be little memory, and therefore an insufficient basis on which to form sound reasoning judgments. I think it may be stated without hesitation that the action of alcohol on the power of attention is to make it less keen.

Rising to the supremest mental faculty of all—that of the will—can it be said that alcohol has any effect in strengthening it? The ego, the self, the conscious power of choice, free will, the power to do this or not to do it, the faculty of inhibition, is certainly not rationally strengthened, and may as certainly be greatly weakened by the presence of alcohol in the brain, through which will-power is exercised. At least, this is so under the ordinary circumstances of life. When a great choice has to be made by a man, when a great temptation has to be resisted, when the wills of other men have to be dominated by great volitional and mental efforts, who would advise any man to take to alcohol to help him to exercise this supreme power? If he needs such help, his brain is to that extent shown to be weak.

Taking the faculty of speech, which implies both bodily and mental effort, how is that usually affected by alcoholic stimulation of the brain? In nine cases out of ten it is stimulated. The company at a dinner party nearly always begins to talk more after the first glass of champagne. The speech centres seem to act more freely; the ideas find a readier outlet. Excess of alcohol notoriously affects, not only the mental part of speech, but its muscular apparatus. In some persons speech is affected at once by a very small quantity. It is rare that alcohol produces silence. Men are rasher and less cautious in action under its influence. They will thoughtlessly run more risks to their lives when under its influence. Forty per cent. of the suicides in England are due to alcohol. The great instinct of sex and reproduction does not seem to be, in itself, stimulated by alcohol: but, undoubtedly, less pains are taken to restrain that instinct within moral and conventional limits, and

---

(*a*) Abstract of the fifth Norman Kerr Memorial Lecture, delivered in the Hall of the Royal College of Physicians, Queen Street, Edinburgh, on Monday, November 3rd., 1913.

things relating to it are talked of far more freely than when men and women are not under its influence.

Desire is one of the fundamental qualities of man and every one of the higher animals. It is a normal, necessary and primary attribute Desire in an accentuated form becomes a craving, and that craving may be under control or pass out of the regulation of the will. Now, alcohol has in many human beings the fatal power and tendency to rouse an ordinary desire into such a diseased craving. This is one of the most injurious and common of all its evil results on certain human brains. If there is in addition to this an impaired power of inhibition, an actual disease is thereby constituted. The craving becomes uncontrollable. This occurs in the condition we call "dipsomania."

Many of the conventionalities of social life are very essential to civilisation. They contitute a minor code of morals. They are the practical aspect of Lord Haldane's *sittlichkeit.* They express the proprieties, the gentlenesses, and the pleasant things of our lives. In many ways they distinguish civilisation from barbarism. It is certain that any excess of alcohol tends towards a setting aside of many of those conventionalities. A gentleman is presumably under the influence of liquor or slightly off his head who walks along Princes Street without his coat, or even fails to raise his hat to a lady friend, for instance.

The habitual use of alcohol in any degree over the strictest moderation, in my opinion and experience, certainly tends to bring on the signs of old age before their time. Grey hairs, disinclination to muscular exercise and mental exertion, blurred facial expression, loss of keenness of eye, loss of memory, diminution of the usual interest of life, selfishness, are all more apt to come before their time in the man given to take a "little too much."

Some of the Clinical Aspects of Alcohol.

The chief clinical symptoms of alcohol in almost every form have been already described by many authors in many languages. The first treatise of any importance on this subject was written in Norway before the middle of last century. At that time the manufacture and sale of strong alcoholic drinks was absolutely uncontrolled in Norway, and in consequence alcoholism in exceedingly bad form was rampant among the population. This fact and its sequel—which was that the Norwegian Government had, for the sake of the health of its population, to pass stringent laws affecting both the manufacture and the sale of strong alcoholic drinks—had the result that the consumption of it was enormously diminished, and that alcoholism became a rare disease instead of the most common to be met with in Norway. That is a very notable contribution to my subject, and is a most important fact in studying the psychology of alcohol as well as its medical aspects. In what I have to say on the clinical aspect of the subject I shall largely confine myself to its mental and nervous symptoms and to my own personal experience in this department of the subject. I find. as I have said, that I have had under my care, in the fifty years of my practice of medicine, over two thousand cases of alcoholism with mental symptoms, 60 per cent. of those being men and 40 per cent. women. The proportion of alcoholics in the total number of mental patients under my care during that time was 14.5 per cent. Alcohol is, in fact, the most frequent cause of insanity, no single cause approaching it in numbers except the predisposing one of heredity to mental and nervous diseases. In those cases there was seen almost every variety of alcoholic damage to brain and mind. The clinical psychology of a definite toxin like alcohol is of special interest to the mental doctor on account of this definiteness in ætiology. To anyone not acquainted with the human brain and its physiological and pathological conditions, it might be rashly assumed that, the cause being so definite, the clinical effects would also be the same in almost every case. This was very far indeed from being so. Nothing could illustrate better the extraordinary differences between one brain and another than the variety of pathological effects on mind and body which alcohol is capable of producing, either when taken in single doses or for long periods. Those ranged from slight mental elevation up to complete destruction of mind, and from slight insomnia up to complete motor paralysis.

The actual number of patients which passed under my care where alcohol in some way had to do with the mental symptoms was much larger than the number where the symptoms were characteristically those of alcoholism. I did not include under "alcoholism" the cases where, for instance, a drinking bout preceded an ordinary attack of mania or melancholia. To bring out this point, I took the five last years (1903-1907) during which I was Physician-Superintendent of the Royal Edinburgh Asylum, when 450 of the 1,998 patients admitted had alcoholic causes, predisposing and exciting, but only 313 of those 450 had the special bodily or mental symptoms which we call "alcoholism." This gives only 70 per cent. of all the cases where alcohol came into the ætiology as being clinically alcoholism. The symptoms which I put down as specially characterising alcoholism or alcoholic insanity are hallucinations of the senses, morbid suspicions of a certain kind, confusion of a certain type, amnesia, certain forms of impulsiveness and loss of control, certain specific emotional and moral disturbances, mistakes of identities, alcoholic neuritis and paralysis, muscular tremblings, muscular inco-ordination, certain eye and facial degenerations, Korsakow symptoms, and such specific neurological disturbances. In short, I confined this class to the insanities where the brain suffered unmistakably from the distinctive toxic influences of alcohol. There is a great difference clinically between such cases of insanity and those where alcohol has come in as a mere upsetting cause, perhaps incidentally, the symptoms not having its specific toxic characteristics.

My studies and experience of the psychology and social effects of alcohol, and of the clinical symptoms it produces, have led me to one conclusion which I cannot sufficiently accentuate. It is this: that there is an extraordinary want of knowledge among the public, and especially among young men of all classes, as to its real effects. There is a lack of that effective realisation as to its risks which would make men careful about it, and thoughtful as to its use in their daily lives. I have elsewhere written about the importance of a "health conscience" being created in all men and women at an early period of their lives. You ask a young man if he thinks it quite safe to take a whisky-and-soda so often, and find that he knows nothing whatever about the scientific facts as to its potency or seductiveness. He is entirely ignorant of the effect of such a habit on his future life. To a large extent he runs risks through sheer ignorance. Because he feels strong and healthy, and because alcoholic drinks are pleasant and no immediate effects result at the beginning of their use, he will not really believe that there is any danger. Long before the alcoholic habit has been formed, or the mere desire has become a craving, is the time when such knowledge and such an alcoholic health conscience as I am speaking of would come in with good effect.

Dipsomania and Other Forms of Alcoholic Excess.

I do not now propose to go into the subject of the classification of the various forms of alcoholism, except to refer to that form which is usually called "dipsomania." The dipsomaniac has almost always a bad heredity, an unstable brain, and a lessened power of mental inhibition, before he takes to drink at all. He is apt to feel periodically depressed and out of sorts, he is a pleasure-lover, with little stability of character or settledness of life. He is very often of the artistic temperament; his sense of duty is weak, and he seldom sticks to any occupation or work long at a time. When he once begins to drink, his self-respect, his feelings of honour, and his natural affection pass away. He may have periods when he does not drink, and, in fact, when it is disagreeable to him, but those do not last very long, and usually follow bouts of drinking. The condition is incurable except in a few cases where recovery takes place at the end of adolescence, from 25 to 30 years of age. Compulsory abstinence alone prevents him from being a nuisance and a danger to society. He should not be allowed to propagate his species. If he does not take to alcohol, he often takes opium or some other drug. He is commonly a charming person socially, which adds to the risk.

The next form of alcoholism to which I would allude is that which is set up by the brain and bodily damage and exhaustion of severe diseases, such as attacks of insanity, tropical disease, etc., or by injuries to the brain. Frequently the cases in which an alcoholic craving is developed, even in those circumstances, are persons of an originally nervous temperament.

The third and last form of alcoholism which I would allude to is that which arises from the mere habit of taking alcohol, in an ordinary degree to begin with, but gradually proceeding to excess. It usually arises from ignorance or following social custom. There is no brain but may be damaged by the excessive use of alcohol, just as there is no human being that cannot be made drunk by a sufficient quantity of whisky. This habit form of alcoholism might certainly be prevented and extinguished if the knowledge which I have been preaching was acquired in time and used to rationalise the life.

There are two entirely different kinds of arguments in regard to the use of alcohol, either dietetically or as a luxury. The one is founded on the bodily, physiological, psychological, and medical considerations. The other is the altruistic, social, and religious. The one admits the pleasures and advantages, so far as they exist, but strongly points out the risks run and the precautions needed. The other kind could not be better stated than by St. Paul: "For through thy knowledge he that is weak perisheth." "Wherefore if meat maketh my brother to stumble, I will eat no flesh for evermore, that I make not my brother to stumble." He recognised the existence of "weak brothers," and their claims only. Modern science comes in by showing who is the "weak brother," and why he is weak.

A clinical fact of supreme interest from the medical and preventive point of view, which came out in my investigations into my experience, is that at least nine-tenths of my two thousand alcoholic cases who became insane had taken to drinking to excess before they were 25 years of age—in short, during the period of adolescence. Enough is now known of the physiology and psychology of this period of life to have led us to expect this result from any poisoning of the brain during the time it is developing. The brain cells of the adolescent are entirely unfit to tolerate alcohol with impunity.

Practical Conclusions about Alcohol from these Psychological and Clinical Facts.

(1) The action of moderate quantities of alcohol on mind differs in different individuals.

(2) Anything approaching excess is always deteriorating and dangerous to mind and body.

(3) Its chief action is always on the higher and more regulative of the mental faculties.

(4) It affects the finer muscular co-ordination even in moderate doses.

(5) Some qualities of brain are much more susceptible to its influence than others.

(6) Its pleasant personal and social effects can only be safely obtained in fully-developed, healthy men with a reasonably good nervous heredity, and taken in strict moderation.

(7) Its dangers should be made known to every citizen early in life.

(8) To the female sex it is especially dangerous.

(9) The period of adolescence is by far the most dangerous time of life in regard to alcohol, and therefore it should not be used then at all.

(10) A nervous constitution of brain and a bad nervous heredity imply a special susceptibility to its evil effects. Scientific facts would point to complete abstinence from it by persons with this constitution.

(11) Mental disease and defect would be diminished if alcoholic excess did not exist.

(12) Alcohol in excess predisposes to and causes many forms of bodily disease, and reduces the chances of recovery in all bodily diseases. Certain of its bad effects on the brain are probably harmful to descendants.

(13) Scientific facts point to a great diminution of alcoholic mischief if no alcoholic drinks containing more than 18 per cent. of absolute alcohol were used, except for medical purposes.

(14) New legislation is needed for those who labour under the disease of an uncontrollable craving for alcohol, and also to diminish temptations to its use.

(15) The most hopeful fact in regard to alcohol is that its excessive use has undoubtedly diminished in the last hundred years among the evolved, the educated, the reasonable, the well-off, and the self-respecting part of the community in all civilised countries. The increase of knowledge and of self-control, the lifting up socially of the poorer, the rationalising of our city life and conditions, the gratification of human nature's craving for happiness by the provision of healthy modes of life, amusements, good and abundant food, the practice of the rules of a scientific sociology, the wider knowledge of the dangers of alcohol, the efforts of our clergy, social workers, medical officers of health, the school medical officers, the segregation of the irreclaimable drunkards, and the diminution of bad nervous forms of heredity through the practice of eugenic laws, will no doubt help materially to bring in the era of a sober people.

THE SUPERVISION OF THE HEALTH OF CHILDREN BETWEEN INFANCY AND SCHOOL AGE. (a)

Report by W. W. James, F.R.C.S., L.D.S.,
London.

(Concluded from page 478.)

Deformity of the jaws associated with nasal obstruction can be seen at quite an early period. The lack of development is marked in the temporary dentition by the absence of spacing of the incisors; at times the incisors are crowded as if not only is there lack of development but active diminution of the arches. The latter might be accounted for by impaired development occurring prior to eruption of the temporary teeth, but this does not seem likely, as the incisors are chiefly affected and not the canines, which, erupting later, are found to take up their positions in the arch; the explanation is to be found, I think, in the absence of contact of the tongue against the palate, whilst the pressure from the cheeks causes lateral compression.

The protrusion of the maxillary incisors is another deformity seen in the temporary dentition. Should this condition coexist with the mechanical distortions described above it may be difficult to determine the more important factor.

The change in occlusion which, I believe, occurs in the process of normal development usually does not take place. Instead of the incisors biting edge to edge, those of the mandible continue to occlude posteriorly to the maxillary incisors, and they do not show attrition marks. A factor which may play a part in producing post-normal occlusion in these cases is mouth-breathing. Where the mouth is constantly open the muscles are at a disadvantage in supporting the mandible and the structures attached to it below. The weight of the pharynx and larynx constantly tend to displace the mandible in a downward and backward direction. In mouth-breathers where the jaws are not occluded, this force is sufficient to hamper advancement, or may actually cause backward displacement of the mandible. This view is introduced as it partly accounts, I believe, for the impaired respiration in mouth-breathers, the backward displacement of the tissues causing some obstruction. It is well demonstrated in patients under an anæsthetic, particularly in a sitting position, for if the mandible be pulled forwards respiration is markedly free, whilst backward displacement of the mandible with the mouth open causes marked obstruction. In the dead subject, when the muscles are quite passive, the mandible from the mere weight of the structures attached assumes a posterior position. A child whose mandible had assumed a post-normal position (associated with tongue-sucking) was advanced with such marked benefit to health that the father, a medical man, commented upon it. The greater freedom of respiration seemed to be the only explanation. The dental arches were well developed, and there was no nasal obstruction. It has constantly been stated that imperfect aeration of the blood is a result of nasal obstruction, and the view expressed above may be the true explanation, as apart from this there does not seem to be any reason why air should not enter as freely through the mouth as the nose.

(a) Paper read before the Joint Sections of Hygiene and Preventive Medicine and of Stomatology, International Congress of Medicine, August, 1913.

The teeth are more prone to caries in mouth-breathers, and inflammation of the soft tissues is likely to occur. Both of these are probably associated with the deficient bathing of the parts by the saliva. Further reference to the effects of nasal obstruction will be made later.

Constitutional Disturbances during infancy may have a marked effect upon the teeth; the effect upon the jaws is less easily proved, as other factors are usually present. The temporary teeth may be delayed very markedly in their eruption; they are often imperfectly developed, as has been stated already. In cases where dental caries is extensive a history of disturbed nutrition in very early life is frequent. Rickets and dental caries are usually associated. The very early eruption of the first permanent molars is not infrequently seen in rickets. In several cases these teeth have been present in children of about four and a half years; the condition in some of them resembled an exfoliation rather than an eruption—in all cases the tooth was imperfect.

Little can be done beyond improving the general health of the patient and dealing with the local conditions as far as possible.

During the period under discussion, between infancy and school age, deviations from normal development and other pathological changes comprise for the most part the continuation of the processes just described as arising during infancy. The various conditions can be discussed, for convenience, under the following headings:

Imperfect and Abnormal Development of the Jaws and Dental Arches.
Dental Caries.
Maldevelopment of the Teeth.
The more Uncommon Conditions.

Some reference must be made to imperfect development of the jaws and dental arches, although the subject has become so important that volumes might be written upon the views of different observers and the criticisms made upon them. Reference has already been made to some of the possible causes, for in nearly all cases they occur prior to eruption of the permanent teeth. Formerly malformations were dealt with when they were definitely established, but, with an increasing knowledge of the causes, the treatment and prevention of these conditions must pass to an earlier period.

Numerous classifications have been made of the types of maldevelopment, based chiefly upon the arrangement of the teeth; they have helped considerably to further knowledge, but at present none of them can be regarded as satisfactory.

If the jaws and teeth after eruption of the permanent teeth are not perfect in their development it must be due to a condition of either arrested or abnormal development. This clinical division is convenient as it emphasises the conditions found, but both are present in many cases. A satisfactory classification, it would seem, must be based upon primary causes when we possess sufficient knowledge of them.

That development of the jaws has been arrested in some degree is evident in many cases, for the teeth occupy positions in the arches similar to those which they occupied prior to eruption.

That abnormal development of the jaws occurs is also quite evident in a great number of cases, growth taking place, but in a position which can certainly be described as a deviation from the normal.

It is undesirable to labour these points, but it may be well to point out that deficient growth or abnormal growth can occur in three planes, laterally, antero-posteriorly, and vertically. Deficient growth in each direction is seen where the dental arches are too narrow, where they are short antero-posteriorly, and where the teeth appear to be only partially erupted. As the result of the arrested development of the jaws the teeth must take up the positions possible to them during eruption.

The erupting teeth can be divided into two groups, those which meet with no obstruction, and those which are obstructed by firmly implanted teeth already in position. The molars, the central incisors, and the first premolars belong to the first group, whilst in the second group the lateral incisors erupt between the central incisors and the temporary canines; the second premolars between the first permanent molar and the first premolar, and the canine erupts between the lateral incisor and the first premolar. The irregular arrangement of the lateral incisors and the canines is well known; the second premolar displacement is typical, but the tooth occasionally gains space by the forward movement of the first premolar at the expense of the canine, or occasionally the second maxillary premolar has preceded the first. Where the arches are only slightly deficient a variable degree of rotation of the teeth in the latter group is seen.

The eruption of the first permanent molars may be defective in a vertical direction, and, in my opinion, is often due to lack of development of the mandible, which is indicated by absence of the edge-to-edge occlusion of the temporary incisor teeth.

That the teeth may be large and the jaws small is a possibility, and may account for some of the cases which appear to be due to deficient growth.

The abnormal development of the jaws is well illustrated in cases where protrusion of the maxillary incisors occurs. the bone projecting with the incisors anteriorly and instanding at the sides, particularly in the premolar region, whilst the incisors of the mandible with their supporting bone are elevated above the level of the teeth behind them, their elevation being due to the lack of opposition of the maxillary teeth as they are found to occlude with the palatal mucous membrane.

In some cases, including those described as "open bite," deficiency of growth probably plays an important part, but impaired development, as in cases of rickets, may account for the condition.

Much discussion of the lines of treatment of these cases could be introduced, but here it must suffice to say that two methods may be adopted in many of the cases. The best results are usually obtained by increasing or altering the dental arches so that the teeth are correctly arranged, but excellent results can sometimes be obtained by extraction of some of the teeth.

The treatment in both cases should be commenced early. If expansion is intended correct occlusion must be established and the arches corrected by the use of apparatus. In the cases where extraction of teeth is to be undertaken the temporary canines should be removed to prevent the very common overlapping and crowding of the permanent incisors, and at a later stage removal of the maxillary first premolars and perhaps those of the mandible. The time of eruption of the canines is usually the best period at which to undertake the premolar extraction, the erupting tooth passing into the space made, whilst the teeth already erupted will probably not be affected. As a routine in hospital practice, the method just described is usually sound, although impossible in many cases. Each case demands individual consideration.

Dental Caries has already been referred to in the account given of temporary dentition, and much that has been said applies to the permanent teeth. The commonest site for its commencement is in the fissures of the crown of the first permanent molars, although it is not uncommonly seen on the surface of this tooth next to the temporary molar when the latter has a carious cavity on that side. Elsewhere, caries of the temporary tooth may cause the neighbouring tooth to become carious, as is seen in a first premolar from contact with a carious second temporary molar or canine; it applies particularly to "crowded" mouths.

Mouth-breathing is the most frequent factor in producing caries of the incisors at this period, although hypoplasia of the teeth may be almost as important. It is of interest that the two conditions are frequently seen together.

Dental caries affecting the first permanent molars is so common, and the tooth is so very important, that it might be regarded as the point upon which the whole of the present discussion, from the stomatologist's point of view, turns. In a great majority of cases the preservation of these teeth in a healthy state will render the establishment of a functional and clean mouth relatively much easier.

The eruption of the first permanent molars is very rarely recognised by the child or its parents, a fact of much significance as the tooth may be neglected in cleaning, and should it become carious, may be regarded as a temporary tooth and thought not to matter. Prior to exposure of the tooth in the process of eruption, the gum behind the last temporary molar is found to be full and often flattened by contact with the gum of the opposing jaw; later, the tissue is perforated by a cusp and the crown of the tooth becomes exposed; the rate of denudation of the tooth varies, being long delayed, for instance, in those cases where vertical development is imperfect, but rapid where the jaws are well developed. The degree of freedom of the tooth from overlying tissue is important, for if food can lodge caries will more readily occur. The great advantage of well-developed jaws is therefore evident.

The frequency of hypoplasia of this tooth as the result of disturbance in early life favours the induction of caries, although by removing the ragged edges of enamel and applying nitrate of silver caries may be prevented; but the application of nitrate of silver where softening is more than superficial is useless, and it is only too common to find extensive caries in teeth which have been so treated instead of being filled.

Commencing caries in the fissures of the crown should be most carefully sought for and fillings inserted. It is unnecessary at an early age to do more than fill the carious point of the fissure with a more or less temporary filling such as hard gutta-percha, cement, or copper amalgam and later fill the tooth permanently when the child is older and all the fissures can be cut out more carefully.

If the pulp is involved a most serious consideration has to be faced. The patient may be difficult to manage and treatment of the pulp almost impossible. The pulp might be capped, but this is a procedure which is too dangerous, for supposing it becomes infected in a few years, an acute alveolar abscess only too commonly results and the tooth must be removed, conservative treatment probably being impossible.

The questions, Can the tooth be saved permanently? Will the removal of the tooth cause serious malocclusion? are the two considerations upon which the decision rests.

If asepsis can be maintained the answer to the first question is almost certainly "Yes," unless the caries extends below the attachment of the gum at the neck of the tooth.

The second question can also be answered in the affirmative in almost all cases, the exception being where the jaws are small; in those cases where the teeth are large and the jaws small the resulting occlusion may be good. The general conclusion will favour the tooth being retained, but each case must be decided on its merits.

Caries in the maxillary incisors must be dealt with thoroughly; loss of the crowns is not uncommonly seen where fillings obviously have been inserted in cavities improperly prepared.

Premolars are not infrequently carious. In mouths with teeth very liable to become carious, if crowding be marked, extraction is likely to give the best result. All proximal cavities should be filled as permanently as possible whilst the tooth surface is accessible; the cavity has usually resulted from caries in a temporary tooth; the latter should be removed and the filling undertaken before the permanent successor erupts.

The subject of dental caries has perhaps received more attention than any other condition of importance to the dental surgeon. It is known to be directly due to the action of micro-organisms, although specific organisms have not yet been isolated. The process consists in the production of acids, chiefly lactic acid, from the carbohydrates of food causing decalcification of the tooth, and secondly in the destruction of the organic tooth substance by a process of peptonisation. The preventive measures suggested are many, and several are of undoubted importance.

With regard to the teeth themselves, their structure and arrangement can certainly be relatively favourable or unfavourable to caries. Recently it has been demonstrated that the enamel of the teeth varies considerably, and the terms "malacotic" and "sclerotic" have been suggested for the two marked types which have long been described clinically as "soft" and "hard," and that the enamel development could be influenced by functional activity during infancy. These views upon the variations in the resistance of enamel can certainly be supported by all who are acquainted with caries of the teeth.

The arrangement of the teeth is a factor which has long been recognised; caries always commences at points where food can lodge. If the teeth are irregularly arranged, food can lodge easily and caries eventually ensues. Functional activity to encourage normal development of the jaws must therefore be regarded as one of the defensive factors.

The natural processes by which cleansing and protection of the teeth should take place are of the utmost importance. They depend upon the nature of the food and local factors. Food which readily collects on the teeth, and particularly if it is not easily removed, must necessarily be a potent cause of caries. The prevalence of dental caries has been attributed to the increasing use of soft foods from which the fibrous elements have been removed; foodstuffs which possess fibrous elements are themselves not only easily removed, but they mechanically cleanse the teeth during mastication. The advantage of a diet which in itself cleanses the mouth—for the soft tissues will benefit as well as the teeth—is obvious.

The effect of the food upon the secretion of saliva is a factor recently brought forward, and most interesting experiments have been carried out to show the influences of many food substances. The results of these experiments prove that the salivary secretion varies in quantity and quality with the particular food taken, those substances having the most marked effect being the organic acids which occur naturally and substances which have definite flavours; diminished secretion results from substances which are alkaline or devoid of flavour. The saliva is regarded as a natural mouth-wash, and all its components are valuable in protecting the teeth. The ptyalin is regarded as chiefly of use in converting the carbohydrates which adhere to the teeth into a more soluble substance.

A local factor to which attention has not been drawn is the action of the tongue. That this is important in animals, such as the carnivora, will hardly be doubted, and that the surfaces of the teeth over which the tongue, lips, and cheeks readily pass are usually free from caries, is in some degree significant, although it is true food does not easily lodge upon these surfaces. Whether variation of the papillæ upon the tongue is related to the incidence of caries is perhaps worthy of investigation.

The further development of dental caries is certainly hindered by a complete eradication of carious lesions already present in the mouth. Patients who have suffered severely from caries may experience a long period of immunity if absolute elimination has been carried out; many observers must be able to bear out this statement from clinical experience. If this view is accepted dental caries must be regarded as an infective process.

A negative factor for the prevention of caries to which some importance has been attached is the exclusion of the carbohydrates which are most readily fermentable. It is urged that the increased use of monosaccharides, such as glucose, accounts for the great increase in caries. That children who eat large quantities of sweets may have extensive caries is certainly true, and in particular cases probably cause and effect are correctly associated.

Mouth-breathing has already been discussed in some degree, but one characteristic, gingivitis, which is most marked when the permanent teeth are erupted, must be referred to here. The gum-tissue in the front of the mouth, and particularly of the maxillary incisors, although other parts are also affected, show changes indicating chronic irritation, the parts are swollen, bluish or dark red in colour, dry or covered by inspissated mucus. The condition is obviously due to the drying caused by the constant flow of air over these tissues, and the absence of repeated bathing by the saliva which should occur normally. Dental caries is commonly seen in the maxillary incisors, and sometimes occurs in those of the mandible. The serious consequences which may ensue are such that every effort should be made to arrest the condition. The nasal obstruction must be removed and nasal respiration established. Breathing exercises must be practised, and should the mouth-breathing still continue at night, in spite of the efforts of the patient to control it, an apparatus should be worn. The apparatus used by the writer consists of a metal frame with thin rubber stretched over it, which is inserted inside the lips and cheeks and lying on the outside of the teeth and gums.

Every attempt must be made to keep the teeth clean; they should be scaled and polished, the cavities filled and regularly attended to by the patient and the dentist. Pyorrhœa alveolaris will certainly become established if this condition of gingivitis is not corrected. In addition to the regular cleaning by the patient, a valuable and simple method consists of massage of the gums by the use of a material such as butter muslin wrapped round the finger. Local applications of iodine, or very weak iodine as a mouth-wash are useful, but the teeth become badly stained. Hydrogen peroxide is perhaps the most useful mouthwash. Should the gingivitis have caused much swelling so that marked pouches exist between the gum and the teeth, a syringe with a fine nozzle should be used regularly.

Maldevelopment of the Teeth results from disturbance during the process of development; constitutional conditions such as rickets, syphilis, acute specific fevers cause hypoplasia, which is seen only too frequently. In addition to these, a local factor, severe inflammation due to infection of the tissues from a temporary tooth, ought easily to be prevented; hypoplasia of a single tooth is due practically always to this cause, and at times loss of the tooth has resulted by the inflammation leading to necrosis of the tooth or even of the jaw. In connection with hypoplasia, it is of some interest that the formation of enamel appears to continue almost to the period of eruption.

Of other affections space does not allow of their discussion, such as different forms of stomatitis, which may be severe; extensive suppurative conditions, particularly associated with the first mandibular molar; injuries to the teeth; the effects of completely misplaced teeth and many other conditions which may call for careful consideration.

The means which can be adopted by the patient and by the dental surgeon to maintain the mouth in a healthy state need only be outlined in most instances, as many of the methods of treatment have already been mentioned when the various pathological conditions were referred to.

In the first place, harmful habits must be prevented, such as thumb-sucking, teats, &c. It has been urged that a teat of a correct shape may be of value by inducing functional activity of the jaws and so aiding development, but the risk of establishing a bad habit is too great to justify its use.

The habit of grinding the teeth is often associated with well-developed jaws. It cannot easily be encouraged or discouraged, but that it is a common habit, and certainly appears to be beneficial to the child, makes it worthy of comment.

Food is a factor of the greatest importance. It should be of such a nature that the jaws and teeth are exercised and development promoted. The fibrous elements should not be removed, as they mechanically clean the teeth and stimulate the gingival tissues. Of all the means suggested for maintaining the mouth in a healthy condition, the presence of the fibrous elements appears to be the most important in its influence on the soft tissues. Some of the food at each meal should be of such a nature that the flow of saliva is stimulated. Harmful substances which stick to the teeth and are not easily removed should be avoided, or when eaten combined with and followed by beneficial substances such as raw fruit, &c. Sweets in large quantities certainly should be eschewed.

The habit of removing food from the teeth with the tongue is a valuable cleansing process, but one which can hardly be carried out except in private. Where the teeth are perfectly arranged in healthy individuals whose tissues possess vigorous tone, the tongue, cheeks, and lips probably constitute a most powerful influence in keeping the mouth clean.

In some children, especially girls with dry and sticky mouths, not infrequently it will be found that insufficient liquid is taken.

The mechanical cleansing of the teeth with a toothbrush is undoubtedly of great value. In the case of the temporary molars, if the biting surfaces of the crowns be brushed with a stiff-bristled brush caries may be prevented entirely, except in the case of children with mal-developed teeth. The particular directions with regard to brushing should be, "use a very short movement, brush one tooth at a time, commencing on the biting surface, brush all surfaces; the inner surface is more difficult to brush than the outer surface and so requires more care." Soap is an essential ingredient of a tooth paste or powder.

The duty of the dental surgeon comprises prevention of lesions which will cause maldevelopment, correction of conditions as they arise, and the removal of factors which will cause an unclean state of the mouth. Under favourable circumstances the teeth can be arranged in perfect arches with correct occlusion. If crowding of the incisors occurs after eruption and the arches cannot be expanded, the temporary canine teeth should be extracted to correct the overlapping which is so common in these teeth, and the subsequent deformity corrected later, probably by the removal of the first premolars.

Carious temporary teeth must be filled or, if the pulps are involved, extracted. The first permanent molars must be saved if possible, as their extraction is nearly always most disastrous.

Mouth-breathing must be corrected and the associated gingivitis carefully treated. Pyorrhœa alveolaris will arise where the gingivitis and mouth-beathing persists; irregular arrangement of the teeth is another predisposing factor which can be corrected in early life.

In conclusion, the great prevalence of dental disease clearly indicates that our knowledge of its prevention is but meagre. The difficulties of prophylaxis are indeed numerous; lesions may be found at so early a period that preventive measures are impossible, and at later periods others arise which at times are hopeless to deal with except by removal of the teeth. We are well acquainted with the great strides which have been made in conservative dental treatment. The work upon prevention of dental caries has been valuable, but is still undergoing the test of proof. So much is being done by organised effort on the part of public bodies that we can confidently look forward to wider organisation which will include research for prevention and systematic treatment of dental lesions. We can confidently say we have great hopes for the future.

OPERATING THEATRES.

WEST LONDON HOSPITAL.

Plastic Operation for Loss of Skin on the Dorsum of the Hand.—Mr. Aslett Baldwin operated on a girl, æt. 20, who had been knocked down in the street and the back of her left hand injured to such an extent that the whole of the skin on the dorsum and some of the tendons had sloughed. The hand had been treated with antiseptic baths and fomentations, the sloughs had come away, and the back of the hand was covered with a healthy granulating area. The operation was performed in order to cover this in with skin. Two vertical incisions, about four inches long, were made below the anterior part of the iliac crest on the left side; the incisions were three and a half inches apart. Between these a bridge of the whole thickness of the skin and a layer of the subcutaneous fat was raised. The girl's hand was pushed underneath this bridge of skin so that the whole of the raw area of the hand was covered, the fingers being drawn through the anterior incision and so were uncovered. Each end of the bridge of skin was now sutured with interrupted silkworm-gut sutures to the refreshed skin edge at the base of the fingers and at the lower end of the forearm. The operation area was painted with tincture of iodine and a white gauze dressing applied, which was held in position by a bandage. A plaster of Paris case was then applied, which included the pelvis and the left upper extremity, so that movement of the hand was prevented

Mr. Baldwin said that he considered Thiersch's method of grafting would have been unsuitable in this case, as it would not have provided a movable, sound covering for the back of the hand. A covering made in that way would probably have become firmly bound down, interfering with the movement of the tendons, and would have been constantly liable to ulceration owing to its position, which would expose it to frequent injuries. The method adopted would, if all went well, provide a covering of the whole thickness of the skin which would be movable over the parts beneath, and not liable to ulceration from injury or want of nutrition.

Operation No. 2.—In ten days' time the plastic case was removed and the sutured edges of skin were found to be united. An incision was made along the extreme upper end of the bridge of skin, and this was sutured to the refreshed skin at the right border of the hand. A dressing and plaster case were then applied as at the first operation.

Operation No. 3.—In about another ten days' time the same procedure was adopted at the lower end of the bridge of skin, and the hand thus freed from its attachment to the patient's body. As there was some pus about the large raw surface from which the skin had been removed, it was not deemed advisable to attempt to close this at once, but it was left for a future occasion.

Operation No. 4.—The wound having been treated with fomentations, and having become apparently aseptic, the skin all round it was undermined for a considerable distance till the edges could be approximated with only a moderate degree of tension. The wound was then completely closed with silkworm-gut sutures, some of which were inserted about an inch and a half from the edges of the skin to act as stay sutures and to relieve the tension on the others. This wound healed practically by first intention, and the girl left the hospital in about a fortnight's time with all the wounds soundly healed. On leaving the hospital the transplanted skin looked considerably thicker than that on the other hand, but Mr. Baldwin considered that this would greatly improve in appearance owing to the absorption of the subcutaneous fat and thinning of the skin.

The girl has been seen several times since the operations, and the appearance of the skin is gradually improving.

TRANSACTIONS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Joint Meeting with the Obstetrical Society held in the Royal Victoria Dispensary, on Wednesday, October 29th, 1913.

Mr. J. M. Cotterill in the Chair.

Major Leonard Darwin, President of the Eugenics Education Society, delivered an address on

THE NEED FOR EUGENIC REFORM.

The acceptation of the principle of evolution in recent times constituted a revolution in thought, and every revolution in thought was inevitably accompanied by changes in policy and social customs. It was impossible for them to go on acting as if they held the same views as their ancestors. It was the aim of the eugenist to hasten and guide the reforms in social customs and in legislation which must in any case result from the acceptance of the principles of evolution. If they pondered the state of affairs under the poor law, lunatic asylums, administration in regard to crime, the state of slums and so forth, there must be profound dissatisfaction with the existing condition of the country. Remedies must be sought in the ever-increasing knowledge of the laws of nature. Up to that time the efforts of the reformer had been almost entirely directed to conferring immediate benefit on man by altering his mental and physical surroundings. Without relaxing those efforts, they must also endeavour to ensure that their descendants should enter the world with a better equipment to fight the battle of life. They held that both the useful inborn qualities of man and his evil tendencies had been evolved in accordance with the laws of nature, and they hoped that by studying these laws, and by utilising the processes thus discovered by which man had been evolved from a lower type, they would be enabled to take steps tending to ensure that the man of the future should be a nobler thing than the man of to-day. There was danger in scientific dogmas which might entail the death of scientific progress.

Eugenists were not yet in a position to formulate a policy with great precision. There was much work to be done, but much uncertainty was clearing away. They saw clearly that the selection of the ancestry of a future stock was one of nature's ways of ensuring racial progress.

The work of the social reformer and of the student of heredity were both means of advance. The trainers of racehorses did not quarrel about good training or good pedigree. They required both, and in man both must be attempted.

There was already much for eugenists to do. Moral and legislative reforms and scientific investigation were required. Morals and science were the joint parents of eugenics. Galton's definition of eugenics was "the study of the agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally." The meaning of a definition depended largely on the mental atmosphere into which it was received, and this definition would call to the mind of social reformers the "racial poisons," alcohol, contagious disease, etc. The evil effects of alcohol on the drinker and his family were unquestionable. but it was unknown how remoter descendants would be affected. The known facts, however, justified a campaign against alcoholism and disease. It was impossible to say how long the effects of better housing and sanitation would last and how far they would improve the racial characteristics of man. Pending further knowledge, their efforts must not be confined to the cure of faults of environment. They must look to heredity, which was the key by which the door leading to the further advancement of mankind might be unlocked. They might imagine all mankind arranged according to qualities thought desirable. It would thus be possible to divide mankind into those above the average and those below the average in civic worth. Their aim should be to decrease the rate of multiplication in the lower half and increase it in the upper half. But to make this practicable there must be a method of sorting out groups according to innate qualities, and at present they had no means of doing so. Neither poverty nor wealth was a certain criterion, but there was little doubt that the poorest group contained the highest proportion of biologically unfit, and yet they had the highest birth-rate in the land. The more capable classes being higher in the social scale had a greater distance to fall. This led to a prudent care for their own future prosperity, and the wellfare of possible offspring. Marriages were later and children were fewer. As possible stimulants to an increased offspring in the more capable classes, the income-tax might vary according to the size of the family, and death duties might be arranged in the same spirit. The pay of State employees might be partly dependent on the number of their children. Such expedients would only touch a few, and their main hope must rest on an improved mental attitude of the whole nation with regard to the duties owed to posterity.

A man who was not deterred from an improvident marriage by the prospect of want was not to be influenced by eugenic thought. The eugenist must deal with this class, and the interference was legitimate, since this class threw an immense burden of poor law responsibility, etc., on the community. Sterilisation of certain degenerates was now carried out in some of the American states. Segregation was within the range of practical politics since the passing of the Mental Deficiency Bill.

Habitual criminals and paupers judged to be degenerate by various tests should be dealt with as requiring protection against themselves, or for the purpose of protecting the community against present injury and future hereditary taint. On a foundation of scientific investigation they must build a moral superstructure, and here their greatest difficulties would be found. A deep sense of obligation to posterity must be fostered. The economist might aid in making known the burden thrown on the community by the presence in their ranks of vast numbers of degenerates, and the need of reform.

Increased taxation, often hidden in the form of increased rents, lowered wages, increased prices, diminished aid in times of trouble, lessened power of competition in peace and of defence in war, was the penalty they were now paying for the carelessness of their ancestors with regard to the purity of their race. Were they to be equally careless as regards the future? If they could only make the facts known, an appeal to their fellow-countrymen in the name of patriotism would attract enough recruits to their ranks to make the success of their cause a certainty.

On the motion of the Chairman, seconded by Dr. Haig Ferguson, a hearty vote of thanks was accorded to Major Darwin.

A provisional Committee, with Sir Thomas Clouston as Convener, was thereafter appointed, with a view to the formation of a branch of the Eugenics Society in Edinburgh.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, October 23rd, 1913.

The President, Mr. Robert Jones, F.R.C.S., in the Chair.

Mr. G. F. R. Smith read a note on the

ASEPTIC TECHNIQUE OF THE ANÆSTHETIST,

in which he insisted on the preparation of the patient's mouth, on the use of sterilised apparatus—namely, the mask and its cover, the bottle for the anæsthetic, gag, etc. Also the anæsthetist should wear a sterilised overall, cap, mask and gauntlets.

Mr. R. C. Dun spoke of the advantages of the method, especially in operations on small children, where the anæsthetist was of necessity close to the field of operation.

Mr. Thomas Guthrie read a note on

ENUCLEATION OF THE TONSIL.

Referring to the *technique* of the operation, he preferred the guillotine operation, introduced by Sluder in America and Whillis and Pybus in this country, for the great majority of cases. The method, however, failed in a few cases of very adherent tonsil, and in these he employed blunt dissection and a snare. Discussing the indications for the operation, Mr. Guthrie expressed the opinion that in cases of pure hypertrophy of the tonsils in children tonsillotomy was still the operation of choice, provided that not more than the capsule and a thin layer of tonsil tissue were left behind. In such cases, a tonsillotomy, properly performed, was almost always sufficient, and was a less severe operation than enucleation. Bleeding after the two operations was, as a rule, about the same in amount, but there was certainly more risk of troublesome hæmorrhage after enucleation than after tonsillotomy. When repeated inflammatory attacks had occurred, and the tonsil was grossly diseased, or was forming the portal of entry for glandular or systemic infection, enucleation was the only scientific and satisfactory operation. Lantern slides and specimens of tonsils and the instruments used were shown.

Dr. W. Sanderson, Mr. J. Bark, Mr. C. Yorke, Mr. E. M. Stockdale, M. Adair-Dighton, and Mr. Thelwall Thomas took part in the discussion.

Mr. Adair-Dighton read a paper on observations on the

DIAGNOSIS OF THE SUPPURATIVE DISEASES OF THE LABYRINTH.

After reminding members of the fact that one of them, Mr. Edgar Stevenson, had introduced labyrinthology into England as far back as 1896, Mr. Adair-Dighton demonstrated the tests upon a patient by means of the instruments of Brüning. He then took up in detail the various pathological divisions of labyrinthitis, together with the treatment of them. This completed, Mr. Adair-Dighton went into the differential diagnosis between labyrinthitis, cerebellar abscess, meningitis and tumour of the auditory nerve. To wind up, the author was of opinion that no operation, however small, should be undertaken upon the ear without the preliminary application of the functional tests.

Dr. Pantland Hick spoke of a case in which he had been associated with Mr. Adair-Dighton where a successful differential diagnosis of cerebellar abscess had been made by the Brüning tests.

Dr. Warrington said that whilst the nervous mechanism of the vestibular nerve and its relationships to the Deiter group of cells and oculomotor muscles was clearly known, the manner in which different kinds of stimuli excited the several semicircular canals, and so caused nystagmus in different directions, was difficult to follow so as to be able to apply readily in practical work. Further simplification of the *technique* was desirable, especially when it was necessary to examine persons who were ill with intracranial complications. He alluded to the rarity of cerebellar abscess compared with suppurative disease of the labyrinth, and urged the importance of diagnosis *inter operationem*.

Mr. E. Malcolm Stockdale said suppurative middle ear disease attacked the labyrinth in two positions—(1) the region of the promontory, (2) the external semicircular canal in the region of the antrotympanic passage. Total deafness on the affected side would suggest invasion in the cochlear region, and if the auditory apparatus was intact the application of the caloric test would decide whether the semicircular were active or not. If an erosion of the external canal was found during operation, it was usually advisable not to interfere with it. The radical mastoid operation on rare occasions was performed on patients suffering from meningitis. A preliminary lumbar puncture was most helpful in doubtful cases. Death from meningitis, following a radical mastoid operation, and due to lighting up a latent labyrinthitis, although it might occur, was extremely rare.

Mr. Edgar Stevenson and Mr. Hugh E. Jones also spoke, and Mr. Adair-Dighton replied.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting held in Liverpool, October 17th, 1913.

The President, Dr. Fothergill (Manchester) in the Chair.

A selection of old illustrated works on obstetrics, including three copies of Raynald's "Byrth of Mankynd," were displayed by permission of the Hon. Librarian of the Liverpool Medical Institute.

Dr. Briggs (Liverpool) showed a collection of deformed pelves and a series of plaster of Paris casts of face presentations.

Dr. Fothergill (Manchester) showed a specimen of Cæsarean hysterectomy for fibroid. The fibroid was on the anterior wall of the uterus, low down, and completely prevented the passage of the head. Cæsarean section was performed, thereby saving both mother and child.

Dr. Gemmell (Liverpool) showed a fibro-myoma complicating the puerperium. The child was born without any difficulty, but symptoms of sepsis occurred on the third day, necessitating the removal of the necrosing tumour.

Dr. Oldfield (Leeds) read the notes of a case of bilateral ovarian cysts removed during the third month of pregnancy, which continued to full term. No signs of other ovarian tissue could be found in the pelvis and none was left from these two ovaries. For pregnancy to continue after removal of both ovaries is contrary to experimental evidence

Dr. Donald (Manchester) read the notes of a case of puerperal pyæmia, which continued five months in spite of Lantol and vaccines. At one time the patient developed all the signs of pelvic thrombosis, but none could be discovered on operation.

Dr. Fletcher Shaw (Manchester) showed a specimen of perithelioma of the uterus, which ocurred as a polypus, the size of a hen's egg, protruding from the external os. Two years previously he removed a simple fibroid polypus from the same uterus.

ULSTER MEDICAL SOCIETY.

Opening Meeting held in the Medical Institute, Belfast, on Thursday, October 30th, 1913.

Dr. R. W. Leslie in the Chair.

Dr. Leslie thanked the Fellows and Members for their kindness to him during his year of office. He introduced the President-elect and placed upon his neck the President's Badge, the gift of Sir Wm. Whitla to the Society. The badge had been presented to Sir William by the Ulster Medical Society in the year 1909, and was worn by him at all the official meetings of the British Medical Association which he attended as President. It has now been returned to the Society with the injunction that it shall be worn by the President of the Society during his year of office.

Mr. Mitchell then took the chair, and, having referred in sympathetic terms to the loss which the Society had sustained by the death of Dr. C. E. Shaw, he proceeded with his introductory address on

INCAPACITY FOLLOWING INJURY.

The paper was illustrated by a series of lantern slides, which showed how much a hand may be maimed and yet retain the decorative painter's delicacy of touch or the quay labourer's power of grasp. The paper dealt with the relations subsisting between the profession, the patient, the public, and the insurance corporations. He pointed out the great value of X-ray photography to each of these classes, more especially to the last-named, who are still largely dependent for their X-ray photographs on the work done in charitable institutions. Mr. Mitchell urged the importance of placing the purely photographic side of X-ray work within the reach of the general practitioners, and at a fee within the resources of the average artisan. He then directed attention to the gradual lengthening of the period of incapacity after injury following the introduction of the Workmen's Compensation Act, 1906.

Sir Wm. Whitla proposed a vote of thanks to the outgoing President. He also proposed that the President be thanked for his interesting and thoughtful address. This was seconded by Prof. Sinclair, and passed unanimously.

The President then proposed that the recommendation of Council "That Dr. J. Walton Browne be elected an Honorary Fellow of the Society" be passed.

This was seconded by Sir Wm. Whitla, and passed unanimously.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 1st, 1913.

Hæmorrhage in Throat Operations.

The ablation of tonsils and vegetations from the back of the throat is an operation of daily occurrence, and the hæmorrhage that may result interests both the specialist and the practitioner. The hæmorrhage may be primary or secondary, but generally it ceases spontaneously, nature having provided the vessels with elastic fibres that provoke contraction and endow the blood with substances which favour coagulation.

Primary hæmorrhage after the employment of the amygdalotome will only occur in cases where the vessels remain patent (sclerosis), where important organs have been wounded (tongue, large artery, uvula), or in such rare cases as diminished coagulability of the blood (hæmophilia). Secondary hæmorrhage sets in on the third or fifth day, and is due to a too early detachment of a clot, the infection of the wound provoking increased tumefaction of the tissues, thus increasing the volume of the vessels.

The treatment, says Dr. Doulcet, consists of a variety of means and measures which can be successively employed as needs be, the first of which is ice. The patient will be told to swallow, not suck, small pieces of ice. In many cases this treatment suffices, but sometimes it fails, when recourse will be had to gargles of a solution of antipyrine or oxygen water, touching the parts at the same time with animal serum (hemostyl, or the serum of Roux). Turpentine has been employed in the same way. Where all these fail, there remains another resource to the practitioner—that of his fingers. A plug of cotton wool powdered with antipyrine or steeped in oxygen water is placed on the bleeding tonsil and kept *in situ* with the finger. The hæmorrhage ceases in the majority of cases. If it returns after the finger is removed a compressor might take the place, the simplest of which is the sugar tongs with a piece of string tied round the branches to maintain the compression. At the same time an ounce of anti-diphtheritic serum is injected subcutaneously, and where it is possible a bleeding vessel is pinched up with an artery forceps.

Hæmorrhage after removal of vegetations may also be primary or secondary. The first duty of the operator is to examine closely the region, as frequently a morsel is only semi-detached, maintaining more or less patent a small artery. Once nipped off, the bleeding ceases. Ice should also be given. At other times nothing remarkable is observed, and yet the hæmorrhage continues. Insufflation of a hæmostatic powder cannot reach the seat of the hæmorrhage; recourse must be had to pouring through the nose, the head being held backwards, a solution of antipyrine or oxygen water, while animal serum is injected hypodermically. If this treatment fails, the nose and pharynx must be plugged.

As regards the prophylaxy of the hæmorrhage, the operator will bear in mind that any acute inflammation (tonsillitis, coryza) should exclude for the time being any interference, also, in females no operation will be done in the week preceding and following the menses. The patient or his parents will be closely questioned as to the possible existence of hæmophilia.

Local Anæsthesia.

Prof. Réclus, the great partisan of local anæsthesia, employs at present the following solution:—

Physiological serum (7-1000), 100 grms.
Novocain, 0.50 centigr.
Solution of adrenaline (1-1,000), 25 min.

A syringe holding two cubic centimetres is used; as many as 45 syringes may be used if necessary in the course of an operation. The solution cannot be sterilised by heat, as heat decomposes the adrenaline, hence it is preferable to add the adrenaline to the solution at the moment of using the mixture. Each layer of tissue must be anæsthetised as the operation proceeds. Thus for the radical cure of hernia, the skin is anæsthetised with six syringes of the solution, the cellular tissue with four of five, the aponeurosis of the great oblique muscle with five syringes, and the tissues surrounding the sac and the cord with four syringes.

In operations on the fingers (whitlow, etc.), a ring of anæsthesia is made around the base of the organ, but here, as in all other regions, it requires ten minutes for the anæsthesia to be complete. The vaso-constrictive action of adrenaline renders the operation almost bloodless, no plugging being required.

GERMANY.

Berlin, Nov. 1st, 1913.

At the Medizinische Gessellschaft Keil, Hr. Birk brought up the subject of

Purgatives and Astringents in Children.

The speaker mentioned it as a fact that as good as no purgatives and astringents were given in the clinics and polyclinics. In the case of infants a strict distinction must be made between children brought up at the breast and those fed on artificial foods. The diarrhœas that appeared in the new born as the commencement of sepsis did not come into consideration as far as the administration of medicaments was concerned. The alimentary disturbancees of breast children depended mostly on over-feeding, for which reason in the milder cases it was sufficient to limit the number of times at which the child was put to the breast; in the severer cases a teaspoonful of castor oil and keeping the child from the breast for 24 hours sufficed. With children with an exudative diathesis one frequently observed a tendency to dispeptic evacuations, in spite of breast feeding. Here the speaker was rather in favour of a calm expectancy than an injurious polypragmasy with drugs. The constipation of infants appeared to be dependent to a great extent on thorough digestion of the milk of the mother. In somewhat more obstinate cases, mild laxatives (Califig., castor oil) were preferable to enemata, which were a constant trouble both to mother and infant. In the digestive disturbances of artificially fed children, calomel formerly played a chief *rôle*. The speaker rejected it entirely, as its action was unreliable, and a deal of mischief had been caused by it in families.

The acute disturbances of digestion were caused by far the most frequently as a result of fermentation of the bowel contents, and the most dangerous agent was apparently sugar of milk. For that reason it had been the aim of his treatment to stop fermentation by dietetic measures. The speaker here warmly recommended Finkelstein's albumen milk, which was the best astringent remedy. The constipation caused through milk feeding was best met by malt soups, purgatives, on the contrary, were contra-indicated.

In the case of older children, diarrhœa was properly treated by the astringent action of fruit soups, and in cases of habitual constipation by dietic measures without the aid of either purgatives or astringents.

Hr. Stoeckel showed two gravid females suffering from

Pyelitis Gravidarum.

In the first case pneumonia and then typhoid were thought of until an examination of the urine brought to light colon bacilli in the urinary tract and showed that the case was one of pyelitis. In that case the symptoms were very severe and medical-dietetic treatment with rest in bed were not sufficient to bring about recovery. Threatening symptoms made their appearance that pointed to general infection, and especially a pronounced icterus. The kidney was very sensitive to pressure, increased in size, so that a strong suspicion was aroused of paranephritic suppuration. In this condition the patient was passed on to the women's wards, as the interruption of the pregnancy came into consideration. The pregnancy was of the fifth month, and by washing out the pelvis of the kidney the disease was so favourably influenced that the pregnancy was allowed to proceed, the fever disappeared, and the patient's general condition became normal. The case showed that by local treatment the end could be attained notwithstanding a serious general condition. It showed also that for the attainment of that end washing out of the renal pelvis must be repeated time after time if necessary. In that case the kidney was washed out for weeks with intervals perhaps of a day now and again. There was no difficulty in carrying out the procedure. The patient was still a little jaundiced, but out of bed and free from fever; the pregnancy was also progressing naturally.

The second case was at first sent into the surgical clinic with a diagnosis of perityphlitis, which frequently was apt to be confounded with pyelitis. Here a single washing out was sufficient to bring about recovery.

The early diagnosis of these cases was of prime importance if the proper programme was to be carried out: cure of the pyelitis without causing any interruption of the pregnancy. In any febrile case during pregnancy when there was any point of tenderness anywhere in the neighbourhood of McBurney's point, either on one side or on both, and there was tenderness also in the region of the kidney, the urine should be submitted to bacteriological examination, the urine to be withdrawn with the catheter. With the presence of bacillus coli with pure cultivation or accompanied by other germs, the diagnosis was tolerably certain. Catheterisation of the ureter furnished complete assurance, and it also at the same time gave the stagnated urine the opportunity of finding an exit. It was without question true that many cases recovered by dietetic measures and rest in bed, but it was equally certain that many cases were allowed to get worse by delay, so that the structure of the kidney was injured and surgical measures became necessary, and the pregnancy was interrupted by abortion. It was only by the timely use of Lenhardt's medicament-dietetic treatment, accompanied by washing out of the pelvis of the kidney that infection of the system could be avoided and the pregnancy saved.

AUSTRIA.

Vienna, Nov. 1st, 1913.

Pathological Theory of Diabetes Mellitus.

The theory of diabetes mellitus enunciated by Dr. Frank is now the subject of considerable discussion. This author upholds the view that both the leading conceptions of the nature and origin of diabetes, although apparently so antagonistic, can really be traced back to a single primordial source. This convergence of pathological views becomes possible if we regard glycogen as the intermediate stage in this connection, and recognise the condition of glycosuria as that of a "pathology of glycogen." Glycogen is frequently regarded as an inert reserve stuff, which is simply stored up in the cells; but Ehrlich has emphasised the view that it is linked up with a transmitting substance, and Arnold has demonstrated the fact of its attachment by a definite relationship to the plasmosomes which are present in the hepatic cells. As a net result, we have reached a biochemical viewpoint which favours the conception that it is not so much to the grape-sugar that we should look, but rather to the glycogen, which is made the subject of molecular change in the course of the metabolism of the liver cells themselves. We know two modes of consumption of glycogen in the liver: the ordinary process, which follows hyperglycæmia; and another, that occurs in poisoning by phosphorus, arsenic, or sublimate, which runs a very rapid course of a few hours, without inducing the slightest alteration in the proportion of sugar in the circulating blood. Obviously, the influence of the poison leads to the rapid consumption of the glycogen contained in the cells. Embden had shown that the complete removal of blood from a liver rich in glycogen leaves behind large quantities of lactic acid; while a small quantity only of this compound is produced by the artificial transmission through the vessels of a liver poor in glycogen of a current of blood rich in grape-sugar. The formation, in a liver drained of blood, of a large number of substances containing azoto-acetic acid can be completely prevented by furnishing the injected liver with a rich supply of glycogen; while the addition to the artificial blood-stream of a quantity of grape-sugar, with a corresponding object, is absolutely ineffective. Embden also points out that the glycogen in the liver cells appears to be chemically more easily assailable than grape-sugar. Dr. Frank believes that the glycogen is attached to the living protoplasm—"vitally fixed"—possibly linked up with a phosphorus-holding complex—the carbohydrate-phosphoric-acid skeleton of nuclein, which, according to Embden's latest researches, would indicate an origin from muscle cells; or, as had previously been thought, in connection with the formation of carbohydrate-phosphoric-acid compounds in the catabolic products which precede the production of sugar. The pancreas would count for something in the regulation of the transmitted glycogen according to this view; the function thereof with those of the liver and emunctory organs dovetailing in the chemism of the living substances of the healthy organism. When this intermediate link fails, the glycogen, having no longer any capacity of fixation, is wholly exposed to the diastatic influence of the cells, and is thus rapidly transmuted into the very unconvertible and unprofitable grape-sugar. The hepatic cells, on the failure of the glycogen supply for their own functional processes, begin to form this very necessary compound from other materials—albuminous *débris*—but always uselessly, as they are unable to fix it under the abnormal conditions. This is the apparent explanation of the deleterious effect of a copious supply of albuminous nutriment, especially of flesh meat, in such cases. The healthy function of vital fixation has failed, and the use of large quantities of meat, in addition to carbohydrates, in the diet of diabetics is shown to be deleterious, by the relatively favourable course of clinical events in the co-called "carbohydrate cure." The grape-sugar passes, in the new conditions, from the liver and muscular system into the circulating blood, and thus produces the familiar condition of glycosuria. The supply of carbohydrates to liver and muscle cannot be turned to good account without intermediate incorporation as glycogen. In presence of this law, the opposition of the two compounds, of which the evidences are so manifest in the human organism, has its significance transferred to a higher plane of unity, and we find a common explanation of the mischievous effects of the dietetic use of sugar by diabetic patients, as well as of the failure of sugar metabolism and the excessive production of sugar in the diabetic organism. Unfortunately, we have as yet attained to no insight into the nature of the process by which vital fixation of the glycogen in the healthy body is effected by the action of the very important pancreatic hormone, nor into the cause of the failure of its physiological production which leads to all the phenomena of diabetes mellitus.

Sir Rickman Godlee, P.R.C.S., accompanied by Lady Godlee, has left for Chicago where he is to give an address at the first congregation of the American College of Surgeons and admit about 1,000 Fellows of the new college.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

The Inclusive Fee in Medicine

The chief item of interest in the billet summoning the statutory half-yearly meeting of the General Council of the University is the report of the Sub-Committee on the Inclusive Fee in Medicine. The objections are stated from the points of view of the Universities and from the point of view of the Extra-Mural Schools. From the University point of view the condition of uniformity is the chief objection, which would make it very difficult to increase a fee, as this would mean getting the consent of all four Universities. Practically, when an inclusive fee was fixed it would have to remain at the same figure. At present the General University Fund is made up of endowments, fees, and Government grants. The first are not likely to increase, as new endowments are nearly always earmarked for special purposes. Every new endowment increases the demand on the General Fund for equipment and other expenses connected with the development of a new lectureship or professorship. The charges on the fund are always increasing, and the only source of revenue which can be expanded is the fee fund. Now, the fee fund could not, under the inclusive fee, be increased either by adding new fees or raising old ones, but only by an increase in the number of students, which is at least problematical. Hitherto the general fund has increased chiefly from this source. The recent increment from Treasury grants is fixed, and is the outcome of prolonged agitation; it has no immediate prospect of being increased. Should an inclusive fee be adopted, endowment for new chairs or laboratories would be a financial embarrassment instead of a gain. What is really required is that the Treasury grants should be reconsidered from year to year, according to what efficient teaching demands. At all events, some new method of financing the Universities will have to be found if the uniform inclusive fee is made a permanent feature in their administration. From the extra-mural standpoint the objection to an inclusive fee is that it would tend to result in the students taking all their classes in the University and the reduction in the extra-mural students would interfere with the initiation of new classes, would abolish the healthy rivalry between intra and extra-mural lectures, would check the supply of teachers, all of which would react unfavourably on post-graduate teaching and research. At the meeting of Council it was explained that the whole question of the inclusive fee was at present under the consideration of a special committee of the University Court, and that it was not desirable at present to discuss the matter in Council.

Working of the Insurance Act in Scotland.

Mr. Leishman, chairman of the Scottish Insurance Commission, addressed the first meeting of the Scottish Association of Insurance Committees on this subject in Glasgow last week. He spoke optimistically of the little friction which had attended the introduction of the Act, and ascribed this to the labours of the various Insurance Committees. In Scotland there were nearly one and a-half million insured, which represented 99½ per cent. of the total insurable persons. The deposit contributors numbered 36,000, and this class was both much smaller than what had been expected and also differed in character from what they had anticipated. Broadly speaking, it consisted almost wholly of good lives. Deposit contributors had drawn out only £800 in sickness and maternity benefit during the year, and there would therefore be a large surplus; it would obviously be good business for the societies to get hold of these people. They now had over £3,000,000 in the insurance fund, and had paid out just over a million. He expressed himself as satisfied with the state of the panels, and with arrangements for mileage; but thought that the arrangements as to prices of drugs would require revision. The Commissioners were highly pleased with the way sanatorium benefit was being worked. Over 2,000 people had been recommended for treatment, of which 75 per cent, had been dealt with in sanatoria, 6 per cent. at dispensaries, and the rest at home. The penny for research was being devoted entirely to that purpose.

Per contra, as the phrase goes, the inhabitants of the village of Stow are not satisfied with their money's worth. The Stow doctor will not go on the panel, and the Insurance Commissioners refuse to provide a resident substitute, but are allowing the insured in Stow to trust to the services of the Lauder doctor, who lives several miles off, across hills which the winter snows often render impassable. At a meeting held in Stow last week it was decided to petition the local Insurance Committee anew to make some other arrangement.

Dr. A. K. Chalmers, Medical Officer of Health for Glasgow, read a paper, on October 17th, at a meeting of the Glasgow School of Social Study and Training, held in the University. His subject was

The House in Relation to the Health of the Inhabitants.

The chief requirements, he said, were fresh air and sunlight. Although the characters of fresh air were somewhat elusive, the question of impurity in the air derived from respiration had a fairly definite meaning, and it lay at the foundation of the defective ventilation of houses. If a person from the open-air entered a room and found it "close" or "stuffy," the limit of permissible impurity had been reached, and the carbonic acid had formed at least 6 instead of 4 in 10,000 volumes of air, which was about the amount usually present in outside air. There were many other forms of impurity diffused and suspended in the atmosphere, both gaseous and solid, derived from combustion and from many manufacturing processes. Notwithstanding these and many other sources of impurity, the diluting power of freely moving air was very considerable, and the difference between the atmosphere of the country and that of a town was less than might be expected. In confined spaces, however, the results were very different. The amount of fresh air required per adult per hour was 3,000 cubic feet; that meant that, in a space of 1,000 cubic feet, the air required to be changed three times per hour to supply one adult with the amount of air necessary to keep the air rendered foul by respiration at the limit of admissible purity. A change of three times per hour was all that could be borne without perceptible draught, as that was practically attainable under natural means of ventilation.

The diploma of the late Dr. Elizabeth Blackwell, the first woman placed on the Medical Register, has just been presented to Queen Margaret College, the women's branch of Glasgow University, by Miss Barry, her adopted daughter. The diploma was obtained by Miss Blackwell at Geneva, in the United States, in 1849, and was registered in the British Medical Register on the earliest possible day—namely, January 1st, 1859, when the Register began.

Sir George T. Beatson, K.C.B., who retired from the active staff of the Glasgow Western Infirmary some months ago, was last week presented with a rose bowl and ornaments by the superintendent and the past assistants and house surgeons with whom he was associated in the Infirmary, in recognition of their high appreciation of his services. Sir George has been appointed to the honorary consulting staff. His successor on the active staff is Dr. G. H. Edington.

BELFAST.

Tuberculosis Medical Officer for Belfast.

At a meeting of the Council of the County Borough on the 28th inst., Dr. Andrew Trimble was appointed to the above post. There were sixteen candidates for the post, but it was generally known that the contest lay between two local candidates. The successful candidate, Dr. Trimble, resides in Belfast, where he has been in general practice for over eighteen years. For five years he was a member of the Council of the County Borough. He resigned this position six months ago, he is a graduate in medicine, surgery, and obstetrics of the Royal University of Ireland, and was placed in the upper pass list at his final examinations. In addition, he possesses the Diploma in Public Health of the Queen's University of Belfast. Dr. Trimble is at present a member of the Belfast Insurance Committee which administers the sanatorium benefit to insured persons. In order to obtain special experience he took a course of study at the Brompton Hospital for consumption. He also attended at the Frimley Sanatorium in order to make himself familiar with the method of treatment by graduated labour. He worked for a time under Sir Robert Philip, of Edinburgh. Dr. Trimble has also had experience as tuberculosis assistant at the Belfast Hospital for Skin Diseases, and worked for three years in the bacteriological laboratories of the Queen's University. We congratulate him on his appointment, and from what we know of his energy and efficiency we believe he will justify his selection to such an important post.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents]

TREATMENT OF FRACTURES OF THE BASE OF THE SKULL.

To the Editor of The Medical Press and Circular.

Sir,—I have read the clinical lecture of Professor Leon Bérard, which appeared in your issue of October 15th, with much pleasure. In well-marked cases of basic fracture, when the symptoms are prolonged with more or less insensibility, restlessness, stiffness of the neck, muscles, and elevation of temperature—provided the condition of the patient is sufficiently good to permit operation—he recommends free bilateral subtemporal trephining with drainage of the subarachnoid space. In other cases of suspected fracture of the base, in which there is no flow of cerebrospinal fluid from the nose or ears and no marked facial paralysis or loss of power of the external oculomotor nerve, he suggests lumbar puncture, performed with every precaution, to improve the pulse and respiration, and to relieve intercranial pressure.

The remarks of Professor Leon Bérard on the after results of severe head injuries I am able fully to accentuate. There is an absolute necessity in all cases for a long period of rest and careful living. I have patients still under observation whose lives have been saved by surgical treatment, and who, after long periods of convalescence, are still suffering from loss of nerve power and incapacity for any mental concentration, so that they are quite unable to follow their former occupation.

I am, Sir, yours truly,
J. Ward Cousins.

October 25th, 1913.

THE ETHICS OF JOURNALISM.

To the Editor of The Medical Press and Circular.

Sir,—The following are the opening sentences of an editorial statement in *The Times* of Monday, October 27th:—

"In *The Times* of Saturday was published a protest from a number of prominent advertising agents against certain circulars recently issued to advertisers by Reuter's Agency. These circulars, which emanated from 'Reuter's Financial Publicity Department,' suggested the advantage of dealing with an agency which had 'intimate relations with the Press,' and could secure 'extended editorial reference' to the affairs of its clients. The Assistant Secretary of Reuter's has now replied to the charge of our correspondents in a letter which, while undertaking to prevent 'misconception' in future, seems at the same time to show a complete misunderstanding of the vital principle at stake."

The correspondence, stimulated by this statement, that has appeared in *The Times* during the past few days tempts me to crave a little space in your pages. The subject closely concerns the medical profession, especially in regard to newspaper puffs of fraudulent quacks and quack preparations. I do not, of course, include *The Times*, which sacrifices thousands of pounds a year by declining this nefarious business. But other leading newspapers, which have on their staffs regular medical contributors, and have constantly thrust before their eyes authoritative evidence of the character of the traffic they are abetting, are not ashamed to derive great incomes from these foul sources. Such conduct of so many leading papers supplies the excuse to the poorer classes of journals in descending still lower and adding their editorial endorsement to the false statements of any financial or medical impostor prepared to pay the price.

The *Westminster Gazette*, like *The Times*, is among the considerable number, albeit minority, of papers that keep their advertising pages clean. Some few years ago it published a protest, like that now appearing in *The Times*, against the suggestion that a theatrical manager advertising largely in its pages should be spared adverse criticism of his plays. The advertiser evidently imagined that in paying for advertisements he was at the same time paying for gratuitous puffs; this probably had been his experience with less honourable papers. The *Spectator* is the most distinguished among the weekly papers that reject every form of objectionable advertisement. It is extremely jealous of the honour of the newspaper Press. It is, however, unfortunate that papers like the *Spectator*, whose withers are unwrung, seem all averse to doing anything to irritate the galls of their less happy brethren.

Almost unconsciously in the course of the two score years during which I have been giving attention to the subject of medical quackery I have accumulated a great store of knowledge bearing on the ethics of journalism. My writings in the medical and lay papers had, I suppose, led the profession to regard me as somewhat of an authority on the subject, and, much to my surprise, a year or so ago I was invited by the British Medical Association to give evidence on this special matter before the Select Committee on Secret Remedies and their Advertisements. I supported my evidence by a collection of leading articles, showing the knowledge of editors, and by fraudulent advertisements and puffs gathered recently from every class of paper. I believe I demonstrated the truth of the allegations I have now made, and showed that the attitude of the great bulk of the periodical Press in relation with gross and palpably fraudulent quackery forms one of the greatest scandals of the present day. For, as I have so often pointed out, it must be always borne in mind that all these papers set themselves up as censors of morals and guardians of the welfare of the people, and that the poor and ignorant take the appearance of an advertisement in their columns as a guarantee of the *bonâ fides* of its author. Many of the facts I refer to must be known to the majority of advertising agents, and it is not to be wondered at if some of them take for granted the unscrupulous character of many newspaper proprietors. If great and honourable daily papers like *The Times* and *Westminster Gazette*, and leading weekly journals like the *Spectator*, wish to escape from the perfectly undeserved stigma involved in classification among the herd of ignoble papers that order their business methods on the basest form of commercialism, they must set to work to expose, denounce, and put an end to the evils I have now tried once more briefly to indicate.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common.
October 27th, 1913.

OBITUARY.

DR. LINTON, EDINBURGH.

Although it is now eight years since Dr. John Linton left Edinburgh, on his retirement from practice, he is well remembered by many friends and patients, who deeply regret the news of his death, which took place at Kinghorn on October 25th. He was born in 1838, and was educated at George Heriot's Hospital, and took his degree at the University in 1861. He practised in Edinburgh for more than forty years, and was beloved by an unusually large clientele of patients, whose interests were his sole care. It is reported of him that for ten years he took no holiday; and that he had neither the time nor the inclination to send out accounts and collect fees. In his early years he assisted Matthews Duncan, then at the height of his popularity, and this no doubt turned his thoughts towards midwifery. At one time he had an enormous obstetric practice. In a single year he attended 460 confinements, and in all he brought into the world some 10,000 infants. From 1868 to 1879 he was a physician to the Sick Children's Hospital, but apart from this he had no important appointments. Dr. Linton had a commanding presence and a calmness of manner which inspired confidence in many a sick room. Constantly pressed by work as he was, he had the gift of never appearing hurried. Dr. Linton married late in life, and is survived by a widow and one of his daughters. He was a doctor of the old school, and, although such a practice as his could scarcely ever be carried on now under modern conditions he represented a tradition which will be respected and admired by all who came in contact with him. He was a man of simple, straightforward character, upright in all his dealings, thinking little of himself and much of his patients, and ever generous to assist the poor and needy.

DR. H. F. PARSONS, OF CROYDON.

The death took place last week, at his residence in Croydon, of Dr. Henry Franklin Parsons, formerly of the Medical Department of the Local Government Board, aged 67. The deceased was the eldest son of Mr. Joshua Parsons, of Beckington, Somerset. He studied at St. Mary's Hospital, obtaining numerous prizes and distinctions, including the gold medal at the D.P.H. examination in 1876. He qualified as M.R.C.S., L.S.A., in 1867, becoming M.D.Lond. in 1870. He was an examiner in Hygiene and State Medicine for the University of London, and for the Diploma of Public Health at Cambridge. After being in private practice for a few years, he was appointed Medical Officer of Health for the combined districts of Goole and Selby in 1874. Five years later he became a medical inspector of the Local Government Board. His connection with the Local Government Board closed early in 1911, when he retired under the age-limit regulation of the Civil Service. Dr. Parsons served on a great many Departmental Committees, including that on water, gas, regulations as to cremation, the work of the geological survey, and the medical inspection and feeding of children in public elementary schools. He contributed papers to the "Transactions" of the Epidemiological Society, of which he became President, and to those of other scientific bodies. He was a Fellow of the Geological Society, and among his works were memoranda on the sanitary requirements of cemeteries, disinfection by heat, a report on the influenza epidemic of 1899-90, and an examination of the comparative mortality of English districts.

He married, in 1879, Louisa Anne, eldest daughter of the late Mr. John Wells, of Booth Ferry House, Yorkshire.

MR. E. NETTLESHIP.

We regret to announce the death of Mr. Edward Nettleship, the well-known ophthalmic surgeon, which took place on the 30th ult., at his residence, Longdown Hollow, Hindhead, aged 68. The deceased, who qualified in 1867 as M.R.C.S., L.S.A., became F.R.C.S. in 1870. He was one of the six sons of Henry John Nettleship, solicitor, of Kettering. At first he went to the Royal Agricultural College, Cirencester, and the Royal Veterinary College, and qualified as M.R.C.V.S. He also studied at King's College and the London Hospital Medical Schools. A highly-trained and indefatigable worker, Nettleship rose to great eminence in his special branch of surgery, but at the height of his fame he retired from practice to devote himself to the study of heredity in the causation of disease. To this subject, which had interested him throughout his career, he devoted his indomitable energy and produced much work, the value of which was recognised last year by his election to be a Fellow of the Royal Society. At the recent International Congress Mr. Nettleship made some important communications, and appeared to be in his usual good health; his unexpected death will therefore come as a severe shock to his many friends and admirers. His successful career was due to the minute and accurate observation which he bestowed upon every case, and this care never relaxed. As Consulting Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and Consulting Ophthalmic Surgeon to St. Thomas's Hospital his services were highly valued. The numerous contributions which Mr. Nettleship made to medical literature will keep his memory green in the ophthalmic world, where the "Nettleship Medal," created in his honour, is the blue ribbon for which the younger members strive.

Mr. Nettleship shared the great taste for and love of music which seemed to be hereditary in his family. He married, in 1869, Elizabeth Endacott, daughter of Mr. Richard Whiteway, of Compton, Devon, but leaves no issue.

SPECIAL REPORTS.

THE IRISH MILK SUPPLY.

THE report of the Viceregal Commission on the Irish Milk Supply was presented a few days ago. The report, which is unanimous, is to the effect that from a variety of reasons the growing up generations are not obtaining that modicum of milk that is necessary for bringing up healthy children. The Commission was appointed by the Lord Lieutenant to inquire into the alleged scarcity of milk in certain parts of Ireland; where it exists, its causes, the effects on public health, and the remedies; and also to inquire into the dangers of contamination and infection of the present milk supply and the best means to be adopted to guard against these dangers. The report is divided under two heads:—(1) The milk supply; (2) the purity of the milk supply. The Commission find that in cities and large towns there is no actual scarcity in the supply of milk; that it is not more freely used is due either to ignorance of its value as a food or to poverty. The suggestion is made that where poverty prevents the use of fresh milk separated milk might more frequently be used by adults. One recommendation is made that city and urban authorities should be empowered to contribute from the rates towards the cost of establishing milk depots for infants. Passing from the large to the small towns, the Commission find that while as a rule there is no scarcity of milk in the summer, there is a partial scarcity, more or less accute, during the winter season—*i.e.*, from November to March. To meet this need various remedies are pointed out.

In the rural districts the great problem, however, has been to find remedies for the scarcity of milk in the country, for, paradoxical as it may seem, the scarcity of milk is felt more in rural than in urban districts. From the report it appears that the habits of living amongst the peasantry have during the past 20 years entirely changed—much for the worse; that whereas formerly they lived on milk or buttermilk and oatmeal they now take tea and baker's bread. The disuse of stirabout is also attributed to the lack of milk. The Commission, therefore, dwell on the need of popular instruction as to the value of milk as a food, and suggest ways in which knowledge on the subject could be spread.

Contamination of the Milk Supply.—Under part II., which deals with the prevention of contamination of the milk supply, the report deals at length with the question of eliminating tuberculosis among cattle.

Next in importance to the stamping out of tuberculosis among cattle is the necessity of preventing the use of milk infected with disease. The following recommendations are made: (1) That if the milk of a particular dairy is suspected of causing typhoid or diphtheria, the public health authority of the district in which the outbreak occurs should have the power (a) to take the necessary steps to ascertain if there is a typhoid or diphtheria carrier in the family or employment of the milk-seller, and, pending the result of investigation, to suspend the sale of milk from the dairy; and (b) to go at once without a magistrate's warrant to the farm of the supplier, and require all persons in his employment to give facilities for tests to be made, failing which the authority should have power to forbid the sale of the milk of that supplier within their area.

It is also recommended that the public health authority should have power to stop the sale of milk from any dairy in their district if there is epidemiological evidence that it is the vehicle of infection. A scheme for the establishment of stations for bacteriological examination is set forth, and among other subjects dealt with in the report are the sterilisation and Pasteurisation of milk, the effect of temperature on milk, dried milk, and condensed milk.

MEDICAL NEWS IN BRIEF.

Irish Medical Schools' and Graduates' Association.

THE autumn dinner of this Association was held on Thursday, October 30th, at the Hotel Cecil, Dr. Wm. Douglas, President, in the chair. About 160 ladies and gentlemen sat down to enjoy an excellent repast. Amongst them may be mentioned the Rev. Msgnr. Johnston, Prof. F. G. Donnan, Drs. Michael Taylor, Macnaughten Jones, Douglas Reid, Joyce, A. Prineas Abraham, Lieut.-Col. Moorhead, Surg.-General Greams, Mr. J. Murray (Surgeon to the Middlesex Hospital), Mr. Charles Ryall, Rev. Dr. Houston-Collison, etc. After the usual loyal toasts had been duly honoured, Dr. Shepherd-Boyd proposed "Our Defenders," to which Lieut.-Colonel Moorhead responded. The Arnott Memorial Medal was then presented by the President to Dr. P. P. Garland, C.M.G., for gallantry in Africa—sucking a wound made by a poisoned arrow. Dr. Garland was introduced by Dr. R. Jocelyn Swan. "Our Guests" was proposed by Dr. T. Hobbs Crampton. This toast was responded to by Prof. Donnan in felicitous words and by Monsgnr. Johnston in a speech teeming with anecdote. Next Dr. Macnaughten Jones presented a loving cup, or rather jug, to the Association in memory of having been President three times. The jug was of a very old Irish pattern, and Dr. Macnaughten Jones accompanied the presentation with a few graceful words, which were much appreciated. The health of the President was then proposed by Dr. M. J. Bulger. The toast having duly been honoured, Dr. W. Douglas responded. The musical arrangements were excellent. Besides some pleasant singing by Miss Kitty Ryan and Mr. Lorne Wallet, Dr. Byrne gave a musical sketch and the Rev. Dr. Houston-Collison delighted the audience with Irish songs given in his own inimitable way.

A Fund for Medical Students.

MRS. CAROLINE CONRADINE SOPHIA DICKINSON, of Boscombe, widow of Mr. James Bathgate Dickinson, left estate of the gross value of £15,499, of which the net personalty has been sworn at £13,939. Mrs. Dickinson left £1,000 to endow a "James Bathgate Dickinson" bed in Manchester Royal Infirmary, and £500 to endow a "James Bathgate Dickinson" cot in the Royal Victoria and West Hants Hospital. Subject to several other bequests, she left a fund of £8,180 16s 6d. upon trust to provide four "James Bathgate Dickinson" scholarships for medical students at the Manchester Royal Infirmary and at Owens College, Manchester, one-fifth for a scholarship in anatomy, one-fifth for one in pathology, one-fifth for a research scholarship in surgery, and two-fifths for a research scholarship in medicine. If her estate will then admit of it, she further left £1,800 upon trust, as to one-half for a scholarship in chemistry tenable at the Stalybridge Technical School, and as to one-half upon trust for Epsom College (formerly the Royal Medical Benevolent College) for such purposes other than building as the governors may think fit.

A New Hospital at Tranmere.

The practical completion of the new infirmary and hospital attached to the Tranmere Workhouse was recorded last week, when, at the invitation of Colonel G. F. Allender, the Chairman of the Works Committee, a number of members made an inspection of the building. Accompanied by Colonel Allender, Mr. Edmund Kirby (the architect) and Mr. W. H. Forde (the builder), the guardians toured through the spacious and well-appointed building, which has cost the ratepayers in the Birkenhead union between £56,000 and £60,000.

The Army Medical Service.

The prizes were distributed at the Royal Army Medical College last week by Surgeon-General Sir Havelock Charles. Among those present were Major-General Sir Francis Lloyd (commanding the London District), Surgeon-General. A. W. May (Medical Director-General of the Navy), Surgeon-General Sir James Porter, Surgeon-General Sir Francis Trevor, and the Commandant of the College, Col. B. M. Skinner.

In the course of his address to the officers, Sir Havelock Charles said it was necessary for any man entering upon such a life as theirs to see that his equipment was all that it should be, and also to pay attention to the fact that that equipment should continue up to such a mark as to keep up with the progress of medical science. Referring to the kindred services—the Indian Medical Service and the Royal Army Medical Corps—Sir Havelock said there should be no rivalry. Neither could progress if the other was hurt. To those entering the Indian Medical Service he said there were chances for a man who was still a junior officer. He would be placed in situations where he would have independent charge and be able to show his individuality and personality.

The New King's College Hospital.

The out-patients' department and a portion of the wards of the new King's College Hospital at Denmark Hill will be opened for the reception of patients on Monday, November 10th.

The Royal Institute of Public Health.

The Most Honourable the Marquess of Linlithgow has accepted the Presidency of the Congress of the Royal Institute of Public Health, to be held in Edinburgh from Wednesday, July 8th, to Monday, July 13th, 1914, inclusive, on the invitation of the Right Honourable the Lord Provost and the City Council.

The Royal Army Medical College Awards.

At the recent examination held on the termination of the junior course of instruction at the Royal Army Medical College, Lieutenant R. B. Price was awarded the Parkes Memorial, Tulloch Memorial, and Herbert prizes. The De Chaumont prize was awarded to Lieutenant A. L. Urquhart, and Lieutenant H. C. D. Rankin received the Marshall Webb and second Montefiore prizes.

British Medical Association.

A special representative meeting of the British Medical Association will be held on Thursday, December 4th, and if necessary on the following day, at the Connaught Rooms, Great Queen Street. The business will include the question of increasing the annual subscription to two guineas for members in the British Isles, the report of the State Sickness Insurance Committee, and various matters relating to the Insurance Act.

The Royal College of Physicians of London.

At the ordinary quarterly *comitia* of the Royal College of Physicians, held last week, the President of the College, Sir Thomas Barlow, in the chair, Dr. Frederick Taylor was re-elected a member of the Committee of Management of the Examining Board in England. On the recommendation of this committee the Central London Ophthalmic Hospital was recognised for the course of clinical instruction in ophthalmic surgery.

The following were admitted to the membership:—J. R. Collins, M.D.Dublin; R. R. Elworthy, M.B. Lond., L.R.C.P., and M.R.C.S., Westminster; G. Graham, M.D.Camb.,. L.R.C.P., and M.R.C.S., St. Bartholomew's; J. A. Braxton Hicks, M.D.Lond., Westminster; C. M. Wilson, M.D.Lond., L.R.C.P., and M.R.C.S.

The following had licences to practise physic granted to them at this meeting:—C. S. Archer; W. S. Armitage; C. S. Atkin; F. G. Bell; F. V. Bevan Brown; W. G. Bigger; G. A. Bird; J. Bostock; G. J. Bowen; H. J. Bower; E. J. Bradley; E.H.P. Brunton; N. St. John G. D. Buxton; J. Byrne; E. W. Carrington; F. S. Charnock; Ferozeshah Bapuji Chenoy; F. Cook; G. M. Coope; E. Copians; C. H. Crawshaw; W. Ll. G. Davies; H. V. Deakin; H. S. De Boer; H. R. Dive; A. R. C. Doorley; E. J. Eacrett; A. T. Edwards; Hassan el Arculi; A. S. Erulkar; A. R. Esler; W. S. Evans; J. M. Evatt; B. J. L. Faye; M. Ffoulkes; A. C. Hancock; R. J. Harley-Mason; F. T. Hill; T. A. Hindmarsh; E. W. N. Hobhouse; A. N. Hooper; O. R. Horwood; H. F. Hutchinson: T. H. James; G. B. Jameson; F. E. Johnson; R. B. Johnson; C. Kingston; J. I. F. Knight; N. C. Lake; J. L. Lauder; J. L. D. Lewis; C. C. Ling; W. H. Lister; G. T. Loughborough; O. G. Maginness; D. Mallam; G. N. Martin; E. E Mather; H. Mather; J. Millard; G. H. Monrad-Krohn; J. Y. Moore; W. Morris; J. T. Morrison; M. C. Murphy; M. B. O'Sullivan; H. B. Owens; H. W. Parnis; W. P. Penhale; V. C. Pennell; J. A. Perera; A. S. Plant; J. Precopoulos; E. Rayner; S. J. S. Reid; Evelyn Ritson; C. S. L. Roberts; W. E. R. Saunders; A. E. Schokman; L. E. S. Sharp; G. D. Sherwood; Jagannath Vishnu Shirgaokar; A. C. S. Smith; A. J. E. Smith; H. J. D. Smythe; A. K. Soutar; T. S. Stafford; W. A. Stewart; J. W. Stretton; W. V. T. Styles; W. E. Tanner; J. W. Thomas; J. A. Tsoi-A-Sue; F. C. Turnbull; Chunilal Bhimbhai Vakil; W. H. von Wyss; J. G. Wardrop; C. W. Wheeler-Bennet; C. E. Williams; H. A. Williams; F. E. S. Willis; C. W. Wilson; H. G. Wiltshire; H. G. Winter.

Trinity College, Dublin.

The following candidates have passed the Preliminary Scientific Examination, Michaelmas Term, 1913:—

Physics and Chemistry.— Robert W. Nesbit, Olive G. Blackham, Richard M. B. Gamble, Wilfred V. Pellissier, Frederick J. Smith, William P. Elford, Joseph R. Brennan, Randolph N. C. Murray, Rita Henry, Meta G. Jackson, Stanley C. Mitchell, Harry Banks, Roney Moore Patterson, Richard P. Tobin, Henry J. Rice, Thomas R. H. Dorman, William P. Lubbe, William Andrew Byrn, George Cyril Robb.

Botany and Zoology.—Eric W. S. Deale, Percival A. Dormer, Bryan A. McSwiney, passed on high marks; George F. Fitzgerald, Hirsh Brill, Randolph N. C. Murray, Francis Young Pratt, Thomas S. McDonald, Paul C. Hallowes, James E. T. Nelis, Thomas B. H. Tabuteau, Fleetwood W. P. Sullivan, Walter Martyn Rennison, William Tenison Collins, Crawford L. L. Wilson, Hastings H. Molloy, Norman Gray, Alfred J. Beckett.

Intermediate Medical Examination, Part I.—Sydney V. Furlong, Andries A. L. Albertyn, Grosvenor L. Murphy, William A. N. Oakshott, Robert B. N. Smartt, Charles H. Comerford, Mortimer McG. Russell, John P. Macnamara, Joseph H. C. Walker, George W. Doran.

Intermediate Medical Examination, Part II.—Wm. Hunt, Herbert S. Collins, Violet M. Deale, George O. F. Alley, William E. B. Collins, John Milo Ryan, Henry S. Campion, Francis W. O'Connor, James E. Jameson, Cecil McL. West, William F. Wilson, Henry A. Burridge, Ernest James Hamilton, Thomas E. B. Beatty.

Preliminary Scientific Dental Examination.—Physics and Chemistry.—Maurice Counihan.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

You may talk about poetry, music, and art,
You may talk about conscience and talk about heart,
  You may talk about knowledge, and talk about wit,
  The bane of inspection's the ubiquitous NIT.
(With apologies to Owen Meredith).—*New York Medical Journal.*

MR. A. WELCH (London, E.).—The matter has been taken up seriously by the National Society of Chiropodists, Ltd., 1 Silver Street, Bloomsbury, W.C., who are pledged by their bye-laws not "to operate on the hands or feet for congenital or acquired deformities, or for conditions requiring the use of anæsthetics other than local, or incisions involving the structures below the level of the true skin." The observance of true asepsis is also laid down as a principle to be most strictly observed.

THE CHADWICK PUBLIC LECTURES.

THE two remaining lectures on "The Place of the Open-Air School in Preventive Medicine," will be delivered under the Chadwick Benefaction, by Sir George Newman, M.D., Chief Medical Officer of the Board of Education, at the University of London, South Kensington, S.W., on Tuesdays, November 11th and 18th, 1913, at 5 p.m. Sir Alfred Pearce Gould, M.S., K.C.V.O., Dean of the Faculty of Medicine, will take the chair. Admission free, without ticket.

F.R.C.S.EDIN. (Reading).—The only true test of the lack of sugar in the diet of an infant is the character of the weight chart, which rises and falls irregularly, the temperature also being irregular and generally subnormal. The condition is described by Finkelstein as that of "weight disturbance."

M.B. (Sussex).—The condition is certainly one in which medical aid should have been sought from the beginning. No midwife has any right to let an eruption go on in an infant without skilled treatment. Cases of true pemphigus neonatorum are frequently streptococcal in origin.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, NOVEMBER 5TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8 p.m.: Cases by Mr. Sydney Stephenson, Mr. George Coats, Mr. J. L. Birley, Mr. Charles Killick, Mr. A. S. Cobbledick. 8.30 p.m.: Papers: Mr. George Coats: Some Instances of Disease in the Animal Eye. Mr. C. Wray: Obstruction of Lacrymal Duct and its Treatment.

THURSDAY, NOVEMBER 6TH.

ROYAL SOCIETY (Burlington House, London, W.).—Mr. A. D. Hall, Mr. W. E. Brenchley, Mr. L. M. Underwood, Prof. E. W. MacBride, Prof. B. Moore, Mr. T. A. Webster, Dr. B. Blacklock, Dr. W. Yorke, Mr. T. G. Brown, and Mr. J. O. W. Barratt.

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY) (1 Wimpole Street, W.).—8 p.m.: Discussion: On the Relation of the Internal Secretions to the Female Characteristics and Functions in Health and Disease (opened by Dr. W. Blair Bell, followed by Miss Louise McIlroy).

NORTH-EAST LONDON CLINICAL SOCIETY (Prince of Wales's Hospital, Tottenham, N.).—4.15 p.m.: Clinical Meeting.

FRIDAY, NOVEMBER 7TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—4 p.m.: Cases and Specimens by Mr. Herbert Tilley, Dr. Watson Williams, Dr. Dan McKenzie, Mr. T. Guthrie, Mr. Mollison and Mr. Turner, Dr. Donelan, and others.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (1 Wimpole Street, W.).—8.30 p.m.: Cases by Mr. Fleming, Mr. J. H. Chaldecott, Mr. C. W. G. Bryan, and Mr. Apperly.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8 p.m.: Special Clinical Evening. Cases will be shown from 8 p.m. to 8.30 p.m.

MONDAY, NOVEMBER 10TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Discussion on "The Treatment of Neurasthenia," introduced by Dr. Risien Russell, to be followed by Sir Victor Horsley, Dr. James Taylor, Dr. Grainger Stewart, Mr. Donald Armour, Dr. T. B. Hyslop, Dr. Leonard Guthrie, Dr. T. J. Horder, Dr. M. B. Wright, Dr. A. G. Buchanon, and Dr. Claud Fothergill.

TUESDAY, NOVEMBER 11TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY).—5.30 p.m.: Adjourned Discussion on Mr. Frank Kidd's Paper on "Pyeloradiography." The following will take part in the discussion:—Mr. Gilbert Scott, Mr. Thomson Walker, Mr. John Pardoe, Mr. Ralph Thompson, Mr. A. E. Johnson, and others.

Appointments.

BLAIR, MARY A., M.D., B.S.Lond., Clinical Assistant in the Gynæcological Department at the Royal Free Hospital.

CLARKE, H., M.B., B.S., Junior Obstetric Assistant at the Royal Free Hospital.

DEARNLEY, GERTRUDE, M.B., B.S.Lond., House Physician at the Royal Free Hospital.

HUNTER, JAMES, M.B., Ch.B.Aberd., Medical Officer and Public Vaccinator for the Parish of Forgue, Aberdeenshire.

LEACH, R. E. H., M.B., B.S.Oxon., Certifying Surgeon under the Factory and Workshop Acts, for the Bungay District of the County of Suffolk.

PICKARD, ELLEN M., M.D.Lond., Medical Registrar at the Royal Free Hospital.

Vacancies.

Certifying Factory Surgeon.—The Chief Inspector of Factories announces the following vacant appointment:—Stoney Stanton (Leicester).

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Abersychan (Monmouthshire), Lochgilphead (Argyllshire), Peterborough (Northants). Sedgeley (Staffordshire), Tarbert (Argyllshire), Whaley Bridge (Cheshire).

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing Applications to the Medical Superintendent, Asylum, Maidstone.

The Hospital for Sick Children, Great Ormond Street, W.C.—Surgeon to Out-Patients. Applications to the Secretary. (See advt.).

Scalebor Park Asylum, Burley-in-Wharfedale.—Assistant Medical Officer. Salary £200 per annum, with board, furnished apartments, attendance, etc. Applications to the Medical Superintendent.

Herefordshire General Hospital.—House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to W. A. W. Price, F.C.I.S., Secretary.

Births.

BENSON.—On October 28th, the wife of J. R. Benson, F.R.C.S., Circus House, Bath, of a daughter.

BROMLEY.—On October 31st, at Sible Hedingham, Essex, the wife of Dr. James Bromley, of a daughter.

DICK.—On October 28th, at "Rossendale," Cazenove Road, Stamford Hill, N., the wife of J. Lawson Dick, M.D., F.R.C.S., of a daughter.

HENDERSON—On October 29th, at 48 Rodney Street, Liverpool, the wife of Dr. W. Savile Henderson, of a son.

LIGHTSTONE.—On October 28th, at 12 Fairfax Road, N.W., to Dr. and Mrs. H. Lightstone—a daughter.

LONGLEY.—On November 1st, at Strathearne, Saltburn-by-the-Sea, the wife of J. Alan Longley, F.R.C.S.E., of a son.

MALINS.—On October 26th, at 3 Avon Place, Warwick, the wife of Dr. Herbert Malins, of a daughter.

ROOKE.—On October 26th, at "Fairfield," North Finchley, N., the wife of William Stanley Rooke, M.R.C.S., L.R.C.P., of a daughter.

SIMMONS.—On October 28th, at 2 Southwick Place, Hyde Park, the wife of Dr. G. Alan Simmons, of a son.

WARD.—On October 29th, at Southfield, Yarm Road, Stockton-on-Tees, to Dr. and Mrs. Ward—a son.

Marriages.

MERCIER—MACDOUGALL.—On October 29th, at St. Pancras Church, London, Charles Arthur Mercier, M.D., F.R.C.P., F.R.C.S., of Parkstone, Dorset, to Mary MacDougall, youngest daughter of the late Donald MacDougall, of Glasgow.

Deaths.

GODSON.—On October 26th, at Cheadle House, Cheadle, Cheshire, Alfred Godson, M.B., J.P., aged 77 years.

MALINS.—On October 28th, at 3 Avon Place, Warwick, Mary, daughter of Dr. and Mrs. Herbert Malins, aged 2 days.

NETTLESHIP.—On October 30th, at Longdown Hollow, Hindhead, Edward Nettleship, F.R.S., F.R.C.S., aged 68.

ORAM.—On October 1st, at sea, Louisa, wife of Dr. Percy Sprague Oram, daughter of the late Lewis and Louisa Sharp, of Comer Gardens, Worcester, and Cazenove Road, Stamford Hill, N.

PARSONS.—On October 29th, at Oakhyrst, 4 Park Hill Rise, Croydon, Henry Franklin Parsons, M.D., F.G.S., late of the Medical Department, Local Government Board, aged 67 years.

TURTLE.—On October 30th, at "Kirkmead," Woodford, Essex, from pneumonia, Marion, eldest daughter of Frederick Turtle, M.D.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, NOVEMBER 12, 1913. NO. 20.

NOTES AND COMMENTS.

An Unqualified Practitioner with a Title.

THE limit of amateur doctoring appears to have been reached by Lord Sandwich. According to his own account, he has enjoyed, and still enjoys, an enormous practice among credulous folk in all classes of society. He states specifically that there are few serious maladies to which his healing powers have been unsuccessfully applied. His public profession was made—can it be believed?—within the classic walls of University College, London, at a meeting held to mark the opening of a medico-psychological clinic for the treatment of diseases by means of phychotherapy. His Lordship, after first remarking that the mind had an immense power over the body, stated that while he did not pretend to medical or surgical knowledge, he nevertheless had great experience in healing. After the South African war, he had some 60 wounded officers at his country house, and there was never a nurse or a doctor in the house. He had attended people in palaces, in cottages, in hospitals, in homes, and his patients included a Hindu monk in his monastery, a Mahomedan in his mosque, and so on. He had been asked to explain his power, but he had nothing to explain; he only knew what happened. If he were possessed of that power, there must be many others possessed of lesser powers of healing. So there are, scores of hundreds of persons who lay claim to a supernatural power of healing. One of the most notorious of these pretenders was Mrs. Eddy, who gathered untold riches from her beliefs and practices. Lord Sandwich is an amiable English peer of transparent honesty, but his candour does not prevent a ridiculous assumption of powers that are fraught with constant tragedies.

Sandwich and Sandow.

CAN Lord Sandwich cure a broken leg, or replace a disorganised liver or kidney? If one of the sick folk under his care happen to have a specific complaint, can he still bring about a cure by his "power of healing"? If he can cure one malady, he ought to be able to cure all maladies, for, apparently, he placed no limit on his powers. It would be interesting to learn fuller details as to the 60 "wounded" officers that he so hospitably harboured after the Boer war. What was the precise nature of their wounds? What surgical treatment had been previously administered? What was their subsequent history? It is, of course, obvious that many minor ailments cure themselves, and many aches and pains and mental moods yield to Nature's remedies, such as sleep, fresh air, food, rest, regular habits, good surroundings, and so on. Doubtless persons suffering from such trivialities have furnished the greater part of the vaunted triumphs of Lord Sandwich. All practice of the kind is fraught with the gravest danger, inasmuch as it may lead to the neglect of early or of hidden disease of a serious kind, to tamper with which may raise the issue between life and death. The announcement of such claims as these from an acknowledged seat of learning renders the matter doubly dangerous. The man in the street is ever ready to lend his ear to the wiles of unqualified medical practice. One of the best illustrations of the kind is the claim of Sandow to remedy and cure all sorts of human maladies, a practice which has been shown in these columns to have been carried on under the Royal Arms of H.M. King George.

"Enlightened and Intelligent."

THE jury at an inquest at Waltham Cross found that death was due to heart failure, and added the following rider: "We are of opinion that the three doctors called in were guilty of most inhuman conduct in not attending, and we wish especially to censure Dr. Best for demanding his fee before attending what was evidently an urgent case." We do not, as a rule, look for any high order of intelligence in a coroner's jury—no one but an attorney even pretends to—but we do expect a certain amount of ordinary justice. This egregious rider shows an amazing state of things. Previous to the Insurance Act medical men were graciously permitted to distribute a great deal of vicarious charity at their own expense. They cast bread upon the waters uncomplainingly, and it came back to them in the rare and refreshing fruits of the panel system. And now an appalling thing has happened. Medical men will not work for nothing, and the law and order of the nation stand aghast at such unprecedented effrontery. Dr. Best asked for payment. Whoever heard of such a thing? It was two o'clock in the morning and he had a bad cold, but what of that? The pampered panel doctors of a servile State must not stay upon such trifles. It is their lordly privilege to dash out at the call of every hysterical alarmist who would not insult them by proffering a fee. And if they take their hard-earned rest and make the least show of asserting what is an obvious right for the rest of the world—fancy if a grocer was censured for refusing a free supply of bread to a starving man—the awful penalty of a jury's frown awaits them. A document so foolish is its own rebuke, and we venture to think that the three gentlemen concerned will survive the empty thunderings of the officious casuals who filled the jury box on this memorable occasion.

The Situation at Wisbech.

A SPECIAL meeting of the Isle of Ely Insurance Committee was held at March last week, at which the situation in Wisbech, in regard to the administration of medical benefits under the Insurance Act, arising out of the death of Dr. Dimock, was discussed. A resolution was adopted unanimously expressive of sympathy with Dr Dimock's family, and also recording the appreciation of the Committe of the manner in which he had discharged his duties. It was the wiser plan, under the circumstances, to decide upon the appointment of an outside practitioner to fill the vacancy thus created upon the panel, rather than incur the risk of arousing further local feeling by opening the panel to medical men resident in Wisbech. No good can possibly accrue from speculating upon the manner in which the alleged "persecution" of the deceased practitioner, if, indeed, any existed at all, was carried out, since it is announced that the Home Office has been asked by the Insurance Act Committee, acting on behalf of the British Medical Association, to hold an inquiry into all the facts of the case. Those medical men against whom hostile demonstrations were recently made are certainly in a somewhat unpleasant position, but it is satisfactory to note that, at the meeting referred to, a resolution of "continued confidence in the honour" of one of the most prominent of their number, was passed unanimously. Meanwhile the public, as well as the local members of the profession, will do well to refrain from further criticism until the inquiry has been instituted and its results made known.

A City without Flies.

Bohemia is blest, according to an American Consular report, by an almost complete absence of flies. The reason appears to be in the thoroughness of the sanitary administration, whereby decaying animal or vegetable refuse is not permitted to accumulate or to remain uncovered in or near dwellings. There does not appear to be anything favourable to flies in the air of Bohemia. The Consul at Prague reported recently to his home authorities in America that it was no use attempting to establish a trade in flypapers in that city, because there were so few flies about. Here in the United Kingdom it is to be feared that the Consular report would have of the restaurants, whether in the drab East or the pointed in the opposite direction for a visit to any gilded West, would reveal dining-rooms and kitchens swarming with flies all the year round. If the London County Council wishes to do a piece of real, sound, practical work in public health it has merely to insist that all restaurant keepers shall rid their establishment of flies. This can be effected by the use of suitable fly-traps, poisons and screens, but, above all, by freeing the neighbourhood of refuse and rubbish. Under present conditions there can be little doubt that a great deal of preventable sickness is distributed by the restaurants and other places where food is sold in the Metropolis.

LEADING ARTICLES.

THE BRITISH MEDICAL ASSOCIATION.

As our great medical organisation, the British Medical Association has a claim on the forbearance of every member of our profession. At the same time it would be simple weakness to ignore defects and failings that may end in disaster. The career of the Association during the past few years has been chequered. It put up a good fight against the National Insurance Act legislation and—as must be admitted by friend and foe—it secured substantial concessions from the Government. The confidence of members was first seriously shaken by the acceptance of a high official post among the Insurance Commissioners by their then Medical Secretary. The Council adopted policies that it had not strength to maintain, notably in the shape of the pledge. It delayed its final strategy until several weeks after the Act came into operation, with the result that the main body of the profession fled helter-skelter to the panels. The Council has since reversed its original attitude and become pro-panel. Hesitancy and inconsistency of this kind were not altogether surprising in so grave a crisis, but they had the inevitable effect of causing a good many resignations from the Association. Nor have matters been mended by subsequent events. The recent Bedford libel case showed that absolute injustice could be meted out to a brother medical man by a Branch Association. Now come the final proposals of the Council to extract more money from members. On Thursday, December 4th, a special representative meeting will be held in London to deal with certain resolutions adopted by the annual representative meeting at Brighton in July last. The first important matter to be thus considered is the proposal to raise the subscription from twenty-five shillings to two guineas. Some years ago the subscription was raised from one guinea to twenty-five shillings, and we cannot help regarding the contemplated further increase with apprehension. Should it be carried into effect it seems not altogether unlikely that a temporary check to the advance of the Association may be turned into a disastrous rout. At the same time it is proposed to invite subscriptions from members in order to organise the profession more thoroughly. The appetite for more money, indeed, seems to have degenerated into an insatiable craving, for it is intimated in the *B.M.J. Supplement* for November 1st that advantage will be taken of the special meeting to hold the necessary special meetings required to extend the memorandum of the present company so as to include the power of borrowing money on mortgage or otherwise. This innocent-looking proposal demands careful consideration of members. It may be, of course, that the financial condition of the Association is so desperate that its existence can be prolonged only by the spendthrift resource of living on loans. In any case, as pointed out previously in these columns, the wise and prudent course would be in the first place to cut down expenditure. The *Journal* is a magnificent property which under expert journal management should yield an income almost if not altogether sufficient in itself to satisfy the reasonable needs of the Association. It would be well to conduct a stringent examination into the costs of production of the *Journal*, and if this prove unsatisfactory in comparison with other journals, to lease the publication to outside firms. At this precise moment, moreover, it has come to our knowledge that the management has substantially raised the price of advertisements, already heavy. It may be said that this is a purely office affair, but, on the other hand, it does not lessen the impression of financial stress caused by the proposal to raise subscriptions and to borrow money. The central defect in the Association, if plain speaking be permitted, is its tendency to drift into the control of a small central clique. Years ago the same thing existed and the governing knot of members was known as the "Vital Centre." The constitution of the Association was reorganised not long ago in the hope that control would pass into the hands of members. Recent events, however, have not tended to the belief that the broadening policy has been a success. It would be an irreparable loss to the medical profession of the United Kingdom if the Association were to break down after so many years of steady and fruitful enterprise, but so far as can be gathered from surrounding signs and portents, that body stands in earnest need at the present moment of wise and prudent counsels and of sagacious leadership and disinterested service. As to the financial aspect of the case, the Executive proposes to upset a constitution in order to find new methods of raising income; and it is obviously within the right of every member of the Association to demand that the reasons for the failure of the present system be demonstrated by independent expert authority.

CURRENT TOPICS.

A Committee on Anthrax.

The recent fatalities from anthrax, especially the last case in which salvarsan was used as a remedy, have brought that disease prominently before the public. Comparatively little anthrax is seen in London, a few isolated cases being met with sometimes at Guy's Hospital from the tanneries situated in the district of Bermondsey. The majority of the cases occur in Bradford, the principal seat of the wool-carding and sorting industry. With a view of minimising the risks attendant upon the workers in this trade, the Home Secretary has appointed a Committee to inquire into the dangers from infection by anthrax in the processes of sorting, willeying, washing, combing, and carding wool, goat-hair, and camel-hair, and in the processes incidental thereto; and to consider and report whether any, and if so what, amendments are desirable in the regulations for these processes made under section 79 of the Factory and Workshop Act, 1901. The members of the Committee are:—The Right Hon. Sir Thomas P. Whittaker, M.P. (Chairman); Mr. W. Barber, secretary to the Bradford Trades and Labour Council; Dr. F. W. Eurich, M.D.; Alderman J. E. Fawcett, President of the Bradford Chamber of Commerce and Chairman of the Anthrax Investigation Board; Colonel E. H. Foster; Mr. T. Grundy, secretary to the National Union of Woolsorters; Dr. T. M. Legge, M.D., one of His Majesty's Medical Inspectors of Factories; Mr. Ernest Marsh; and Mr. S. Parker, secretary to the Bradford and District Wool Top and Noil Warehousemen's Union. The Secretary to the Committee is Mr. G. E. Dickering, one of His Majesty's Inspectors of Factories, and any communications on the subject of the inquiry may be addressed to him at 72, Bridge Street, Manchester. The inclusion of Dr. Friedrich Wilhelm Eurich, Professor of Forensic Medicine at Leeds University, will be welcomed by the medical profession, as he has devoted special attention to anthrax. Dr. Eurich is Bacteriologist to the Bradford Anthrax Investigation Board, and Specialist Medical Referee to the Home Office for anthrax and for aniline poisoning, and he holds important hospital appointments at Bradford.

Astrology in Medicine.

Of all the different sciences that claim, in however distant a manner, to possess any bearing upon medicine, that of astrology may be said to have received the least attention. In an enlightened and practical age like the present, it is hardly credible that scientific observers could take seriously the suggestion that medicine could derive any help or inspiration from a science which is now as extinct as the dodo. Nevertheless, from the historical aspect, many interesting facts may be culled from the study of a science which flourished in Chaldea in 1800 B.C. In the first of a series of Fitz-Patrick Lectures on "Astrology in Medicine," delivered last week at the Royal College of Physicians of London by Dr. C. A. Mercier, it was stated that astrology had formed an important part of the life of every nation which had advanced beyond barbarism. The casting and reading of horoscopes, and the attempt to prognosticate disease according to the degree of ascendancy of a particular planet, are still indulged in at the present day by thoroughly up-to-date individuals, who number among their clients all classes of people, some of them highly intellectual, who revel in things mystical. A universal system of medicine was even propounded by Bacon, and people are still described as having been "born under a lucky star," or who are saturnine, jovial, or mercurial. With regard to medical astrology, much curious information has been unearthed by Dr. Mercier, which will form a valuable contribution to the study of the history of medicine, even though it may not have any practical bearing upon the diagnosis or treatment of disease.

The Recognition of Hysteria.

Despite the numerous theories that have been advanced from time to time to account for the sundry and manifold phenomena of hysteria, it cannot be said that the last word has yet been said with regard to the ætiology of this disease. As protean in its aspects as syphilis, it frequently baffles all attempts at diagnosis and treatment. Some interesting points were raised the other day by Dr. T. R. Glynn, Professor of Medicine in the University of Liverpool, in his Bradshaw Lecture delivered at the Royal College of Physicians of London on "Hysteria in Some of its Aspects." Dr. Glynn supported the views of Sir James Paget, Dr. Savill, and others, with regard to the dependence of the majority of hysterical phenomena upon neuro-vascular instability. It seems pretty clear that, of all the different sensory, visual, and psychical stigmata of hysteria, the only unequivocal sign of the disease is the presence of the so-called hysterogenic zones. The presence of a little analgesia upon the back of one fore-arm, or upon the side of the forehead, is sometimes a valuable indication of the hysterical nature of an obscure nervous condition. In many instances no very obvious signs of the affection are present, and these cases are the most difficult to diagnose. Should some organic disease be present at the same time, matters are apt to be somewhat complicated. Of the motor manifestations of hysteria the rhythmic tremors and spasms may be regarded as being the most typical of the disease. Considerable care must be taken to avoid the assumption that all persons of an hysterical nature, or suffering from actual hysteria, are necessarily deceitful. It is true that the mental stigmata of degeneracy are frequently found associated with true hysteria, but it should always be borne in mind that the hysterical individual needs to be treated as a whole, both the mental and the bodily manifestations receiving equal attention.

The Value of Open-Air Schools.

A FEW years ago the promoters of open-air schools were held to be faddists devoid of the true educational spirit. As long as class-rooms were adequately ventilated, it was agreed that anything further was superfluous. With the growth of the anti-tuberculosis movement a definite change has taken place in the minds of educational authorities, and, with such an excellent object lesson as Sheffield, the open-air school process has not only come to stay, but is gradually becoming more and more recognised as indispensable. As Sir George Newman, chief medical officer of the Board of Education, stated last week in the first of a series of three lectures on "The Place of the Open-air School in Preventive Medicine," the tide of physical and mental defect in the childhood of the nation is best stemmed by proceeding along the lines of the open-air school. In order to appreciate its value, however, a much larger conception of its aims and objects must be adopted by the scholastic profession. The true basis of preventive medicine cannot be understood until the great problem of infantile mortality is grasped. It has been shown that the three great causes of death between the ages of five and fifteen are tuberculosis, heart-disease, and pneumonia. The larger proportion of the diseases from which school children suffer are capable of being remedied while they are already at school. Increased facilities for medical inspection and, if necessary, for treatment as well will do much to nip disease in the bud, and also to prevent its dangerous sequelæ by supplying an opportunity for repair and by nurturing the backward and debilitated child. A new way of life is thus opening out for children, and it seems likely that a wisely-conducted open-air school will be as effective in promoting health as a convalescent home.

The Early Diagnosis of Cancer.

THE fact that malignant disease in its earliest stages is nearly always amenable to treatment, surgical or otherwise, cannot be too widely known. It is lamentable to think how many valuable lives are sacrificed annually to procrastination on the part of the patient in seeking skilled medical advice. Even medical practitioners are not altogether without blame in allowing their natural caution in expressing a definite opinion regarding the nature of a growth to develop insensibly into a dangerous "wait and see" policy. The records of the surgical and gynæcological out-patient departments at our large hospitals show many instances of the perils incurred in leaving doubtfully malignant conditions too long. In the case of uterine cancer the question of early diagnosis is, of course, of supreme importance from the operative standpoint. As a matter of fact few women are aware of the significance of certain symptoms of the disease which ought to lead them at once to consult a medical man. A good move has recently been made by the Health Committee of the Portsmouth Town Council, who, in conjunction with the Medical Officer of Health, have taken definite steps towards circulating information respecting the early signs of cancer and have made provision for the free microscopical examination of material in connection with cancer. With a view of securing earlier treatment for sufferers from this disease, a public address is to be delivered by a prominent medical man before an audience of nurses and other ladies interested in social and philanthropic movements. Such an example might well be copied by all health authorities up and down the country, for cancer is a scourge second only to tuberculosis in its mortality. Portsmouth may be congratulated in taking the lead in benefiting a large section of the community in this special direction.

Sex Hygiene.

THERE is a lot of talk going on at present about "sex hygiene." Why this title was chosen we do not know. The subject, as discussed, has to do with the advisability of having an organised system of instruction on the physiology of reproduction, and with the best way of presenting such a system to the mind of the average child. Theoretically, such instruction would be extremely beneficial, and it would save the nation a good deal of loss through preventable disease and other such causes. The difficulties of practice are great. The varying precocity of children, the possibility of directing attention to functions not ready for acknowledgment and the immense importance of a suitable personality in the instructor stand colossal in the path. There is no doubt that the thought of sex is becoming cleaner. There is less furtiveness about the consideration of the way of a man with a maid than there has been for ages. A woman may admit that she knows what we all know she knows, and not lose caste thereby. It is part of our period of paganism. Some of us are getting back the Attic appreciation of the splendour of the body. Stark sex is about us, and from being furtively unclean and most undesirably desirable is gaining a clear and joyous assumption of shining nakedness. This general tone, which is beginning to gleam alike through our literature and lives, may make the limping analogies of the schoolroom superfluous. If a child were not smothered in sex suppression he would learn without deliberate instruction. There is no need to tear down a non-existent veil. Here a little and there a little the spongy infant mind would absorb the truth as he does now, but not the shame of sexual secrecy. Then we would need no coarse official tabulation of the tenderest things of life.

Nastin in the Treatment of Leprosy.

THE cure of leprosy constitutes one of the many hopes and inspirations of scientific medicine, and signs are not wanting meanwhile that the day of realisation may be at hand in a somewhat near future. The treatment by nastin, a kind of vaccine derived from pure cultures of the specific pathogenic organism of the disease, have on the whole proved hitherto disappointing. A somewhat different aspect, however, has been thrown upon the matter by a recent report issued by Captain L. Bodley Scott, of the Indian Medical Service. He deals with an extensive experience of nastin during the past 3½ years in the Sylkit Leper Asylum in India. He remarks that while reports of the use of nastin in Europe vary, those from the Far East, Australia, Africa and British Guiana are all unfavourable. He suggests that this variability in result may be due to the fact that the drug is prepared from specifically different strains of leprosy, and that the road to uniform success may lie in the preparation of the vaccine from local leprosy. Captain Scott arrives at the important conclusion that, although no method has yet been discovered of eradicating the lepra bacillus, yet that we have in nastin a means of restoring to lepers health, strength and working power, "with loss of all troublesome or crippling symptoms." He claims that if the results constitute "cure," then all the cases referred to in his report were cured.

Bristol University.

For the last twelve months or more Bristol University has been suffering from a kind of fame which is the last that should be sought by a young university. Early in its career it burdened itself with a load of honorary graduates, mostly persons of no distinction except that they were inhabitants of Bristol who were members of the Council of the University. The status of the honorary degree of a British University will no longer be admitted as commanding respect until its source be known. The criticism which these honorary degrees evoked might have warned the University authorities to be more circumspect in their activities, but it has not had that effect. It appears that certain of the professors have been removed from office without any cause being shown. The worst case is that of Mr. R. P. Cowl, the Professor of English Literature. Mr. Cowl is stated by those who know him to be a scholar of repute and a teacher of ability. He was, in the first place, compelled to exchange his teaching post for a research chair, and, after a limited period as research professor, was dismissed. No cause has been stated, and all demands for a re-consideration of his case have been resisted. A memorandum, signed by some hundreds of professors in the Kingdom, was recently presented to the Chancellor of the University, Lord Haldane, asking him to undertake a personal inquiry, but this also has had no effect. It is quite obvious that unless university teachers are guaranteed a fair security of tenure in their posts, the intellectual calibre of those seeking to be professors will deteriorate. Bristol University has struck a blow at the standard of university teaching as well as of university degrees.

Blindness in Tabes.

The occurrence of optic atrophy, and consequent loss of vision, in the course of locomotor ataxy has been observed by neurologists ever since tabes was first recognised. The question of the relation between the ocular symptoms and the incoordination of movement has been a favourite theme for discussion, mainly on account of the fact that the former may precede or follow the latter. In an interesting paper by Dr. W. J. M. A. Maloney in the *Journal of Nervous and Mental Disease*, it is stated that neither the occurrence of blindness nor of optic atrophy retards or influences the evolution of the structural changes accompanying the tabetic processes in the spinal cord and elsewhere. A certain amount of improvement in the ataxia may result from loss of vision, because the less the attention is monopolised by vision the less the distraction, and the more perfect is the discrimination of sensations from other spheres. There are other cases, however, in which blindness occurs and the ataxia persists or even increases. In the latter case this generally means a rapid advance in the tabetic spinal lesions. Dr. Maloney formulates the law of the relation of loss of vision to tabes thus; "*cæteris paribus*, of two tabetics, at any stage of the disease, one blind, the other seeing, the blind has the greater tendency to persist coordinate, the lesser tendency to become ataxic." The author has adapted this principle to the treatment of tabes by applying a method of enhancing sensory perception known to the blind, and he has found a degree of improvement greater than that obtained by Fraenkel's exercises. An account of his method is to be published later.

PERSONAL.

Dr. Harold Cairns Terry, M.B., Ch.B.Birm., has been appointed Assistant Physician to the Gloucestershire Royal Infirmary.

Dr. John Hern, M.D.Edin., F.R.C.S.Edin., M.R.C.S., has been appointed in Charge of the Ear, Nose, and Throat Department at Darlington Hospital.

Dr. H. E. Corbin, Medical Officer of Health for Stockport, has been appointed Medical Officer of Health for the city of Calcutta at a salary of £1,600 per annum.

Mr. W. L. M. Goldie, F.R.C.S., D.P.H., Assistant Medical Officer of Health for Norwich, has been further appointed to the post of Tuberculosis Officer for that city.

It is announced that Sir Rickman Godlee, P.R.C.S., now on a visit to the United States and Canada, has received the Honorary Degree of LL.D. in the University of Toronto.

Mr. T. W. Letchworth, M.B., B.C.Cantab., F.R.C.S.Eng., has been appointed Ophthalmic Surgeon to Out-patients at the Hampstead and North-West London Hospital.

Professor Charles Richet, of Paris University, has been awarded the Nobel prize for medicine by the Karolinska Institute at Stockholm, for his work on anaphylaxis. This year the prize amounts to the sum of about £7,948.

A memorial to the late Dr. Stanley Bean Atkinson, for many years a member of the Stepney Borough Council, in the shape of a clock tower, erected in Burdett Road, Mile End, was formally taken over by the Council on the 3rd inst.

Dr. Charles Scott Sherrington, M.A., M.D., F.R.S., D.Sc., Holt Professor of Physiology in the University of Liverpool, has been elected to the Waynflete Professorship of Physiology in the University of Oxford, vacant by the death of Dr. Francis Gotch.

The General Medical Council will hold its next session on Tuesday, November 25th. The President, Sir Donald MacAlister, will not be able to attend, owing to his illness, but we are glad to announce that he is progressing favourably. A chairman will therefore be elected for the occasion.

A movement is on foot at Cheltenham College to establish a memorial to the late Dr. Edward Adrian Wilson, who shared the labours and the fate of Captain Scott on his expedition to the South Pole. Subscriptions will be received by the Rev. P. W. Unwin, the College, Cheltenham, or by Mr. John A. Pruen, Merrow, Guildford, Hon. Secretary of the Cheltonian Society.

Colonel Andrew Clark, D.Sc., F.R.C.S., L.S.A., of Folkestone, late of Harley Street, Hon. Surgeon to the King, Consulting Surgeon to the Middlesex Hospital, a Vice-President of the British Medical Association, and a Colonel in the Territorial Medical Service, left estate of the gross value of £21,320, of which the net personalty has been sworn at £17,407.

CLINICAL LECTURE

ON

CHRONIC INTESTINAL STASIS. (*a*)

By Sir ARBUTHNOT LANE, Bart., M.S.Lond., F.R.C.S.,

Senior Surgeon to Guy's Hospital and to the Hospital for Sick Children.

Sir Arbuthnot Lane commenced by expressing his appreciation of the honour of being asked to speak to members of the profession on a subject which was very near and dear to his heart. There were times in one's life, and the present occasion was one of them, when one wished for eloquence, so as to present one's views more impressively and clearly than he felt able to do. But he would do his best, and he had decided to talk, rather than read the paper which he had prepared for the occasion. The subject was chronic intestinal stasis.

Until a little time ago, the subject was one which received ridicule and derision, especially from the medical side. It was considered that there was no such condition as chronic intestinal stasis; and to speak of it argued a prolific and more or less exalted imagination. But the time had now arrived when medical friends had absorbed the term chronic intestinal stasis, and they now read papers about it. He now felt convinced that it was only a question of time before they would arrive at the conclusions that he himself had reached. It was always the way of our profession. It had been so in connection with fractures; they abused and openly stated it to be a criminal procedure and did not hesitate to employ any means, however unjustifiable, to oppose its introduction. The Commission recently appointed by the British Medical Association showed that every word he had said was accurate in every detail, and at the present time everybody knew it was the proper treatment for fractures. Many, of course, lacked the skill needed to carry the treatment out, but he did not doubt that that would improve. Failures were the best experiences one could have; they taught lessons in a way nothing else could.

By chronic intestinal stasis he meant such a delay of the contents of the whole or part of the gastro-intestinal tract as resulted in the absorption of a quantity of toxins or poisons greater than the liver could translate into harmless material, and greater than the kidneys and skin could get rid of. Anyone who had that condition was in serious danger. Unfortunately, from time immemorial, this subject had been in the hands of physicians, who up to the present had not shown themselves capable of handling it; they considered they had a monopoly of the gastro-intestinal tract, whereas they realised very little about it. They called the symptoms "indigestion." If a man had a defective drain in his house, and the pan of his water-closet was getting full, was it likely he would take a test-meal out of that pan, to see whether it reacted to litmus paper, and if it was acid, put in a little bi-carbonate of soda, and if it were alkaline, put in some hydrochloric acid? It would never occur to a doctor to do that. If the householder knew enough about it, a search would be made for the cause of that obstruction; and if the person concerned did not know enough about it he would get someone in who did. The attitude of the physician had been that of dealing with the full pan; he called it "indigestion" and treated it with drugs; but the time for treating these conditions with drugs had passed for ever. The doctor had got to deal with the causes of things, and deal with them in a rational manner. The creed and the superstitions of medicine had got to go too; it was necessary to get to the ground-floor and ascertain the causes of these conditions, when he hoped they would be dealt with effectively.

With regard to the causation of chronic intestinal stasis, that was brought about, in the first instance, by the bad feeding of infants; they were either too frequently fed, or the foods given them were unsuitable, so that there was a delay in their cesspool or big bowel. That resulted in time in definite changes. The ends and the middle of the distended bowel tried to get into the pelvis, which was already occupied by its proper inhabitants—namely, the bladder, the uterus, and the rectum, which all resented the entry of the cæcum, the iliac colon, and the transverse colon. After the bad feeding in infancy there was the maintaining of the erect posture from morning to night. Nature never intended us to occupy the erect posture; we were intended to live as savages, lying about on the ground and sitting on the floor, instead of being erect all our waking hours. There was a general tendency for the descent of the intestines into the pelvis. For a time the muscles were able to control and maintain the intestines in the usual place, but, when they tired, down came the intestines, and an extraordinary delay in the bowel resulted. In the case of the iliac colon dropping into the pelvis, Nature found it inconvenient and crystallised out lines of force, so that on the outer surface of the big bowel one saw developed tentacles of peritoneum, which attempted to connect or fix down the colon to the posterior abdominal wall. Much discussion had been going on about those bands. Some localised them and called them by different names, such as chronic meso-sigmoiditis, Jackson's membrane, while the part which held up the end of the small intestine they called Lane's kink. But there was really nothing to differentiate one from the other. It was said that some were inflammatory; some were congenital; but he (the speaker) said they were all acquired; they were evolutionary. In regard to this condition he knew he was absolutely right. The anatomy of the coal-heaver was as different from that of those following lighter occupations as ours was different from that of the higher ape. If a child's leg were broken, and it did not join at the proper angle, a new shaft was developed along the lines of force, and the old shaft disappeared completely. Nature did her best to keep the intestines out of the pelvis, the large intestine being the chief offender. It was kept out of the pelvis by these bands which were acquired. People asked why it was that this had

---

(*a*) Delivered at the inauguration of the Winter Session of the North-East London Post-Graduate College, Prince of Wales's Hospital, Tottenham, on Thursday, October 23rd, 1913.

never been observed or described before. The reason was that the surgeon had been accustomed to doing his operations through little holes, and he knew practically nothing of what was inside the abdomen. This led this type of surgeon to be as ignorant of actual conditions as was the physician; he got into the habit of doing certain routine operations; and instead of wondering whether he was doing the right thing, he simply argued and spread himself on the details of the operation. Almost anyone is capable of grasping details, but few appear able to grasp a great principle; indeed, the simpler the principle the harder it seemed for some to grasp it.

The first band developed was that on the left side. That picked up the bowel at the junction of the iliac colon with the pelvic colon. That was an extraordinary kink. In the female it frequently attached the left ovary, and after a time it enclosed that left ovary. Later, the ovary became cystic, and acquired a lining of its own, then bursting out of the nest in which it was developed, it formed a tumour. Woman had a longer abdomen and a bigger pelvis than the male; these were physical disadvantages, though he granted she had advantages over males in other directions. If she had a baby at intervals her prolapsed viscera are forced upwards out of her pelvis and are kept in that position for some time, to the great advantage of her drainage scheme. Should the woman not become pregnant at intervals the left ovary is frequently caught up in the developing last kink, when an ovarian tumour results which acts mechanically upon the prolapsed viscera in a manner precisely similar to a pregnant uterus. Neither the surgeon nor the obstetrician recognised the advantages to a woman of having an ovarian tumour. The last kink also served the purpose of preventing the return of fæces from the pelvic colon into the iliac colon. Many people, if their bowels did not act at a certain time of day, could not get them to act until the usual time next day, because the material ran again into the descending colon, and remained there, away from the pressure of the abdominal contents. That kink made the life of many women miserable, for it fixed down the bowel, secured and anchored the ovary, which could not get out of the way of the pressure exerted by the solid fæces in their passage through this constricted and immobilised segment of bowel. That explained the pain in the left groin experienced by these women.

The cæcum tried to get into the pelvis, and this band did its best to stop it. If one resolved in two directions at right angles the downward thrust of the loaded cæcum acting as the resultant of the parallelogram of forces, one found cystallised lines of resistance outside, which had been called Jackson's membrane; and inside a kink was produced which was named after himself. They represented an attempt by Nature to meet the person's peculiar relationship to his surroundings—*i.e.*, the maintenance of the erect posture from morning to night.

The big bowel was accustomed to deal with almost any filth, and the accumulation of these organisms there did little harm. Writing in 1903, Metchnikoff said he believed the large bowel was the cause of all the trouble and of progressive old age; he also said he believed that in the dim and distant future some surgeon would be found with courage enough to remove the big bowel. He (Sir Arbuthnot) had then been doing that for three years. Metchnikoff then sent one of his senior experts over to study the organisms in the big bowel. He (the speaker) saw Metchnikoff in Paris quite recently, and he did not appear to have changed his mind as to the big bowel being the primary cause of trouble. It was the primary cause in a sense, but only in that it produced a damming back of the contents of the small intestine, and a consequent infection of them by organisms with which this portion of the bowel was unable to deal effectually. This interference with the outflow into the cæcum was the cause of a very large proportion of disease, including certain varieties of heart disease, kidney disease, liver disease, disease of the thyroid, cancer of the breast. Nature's efforts to meet the altered relationship of the individual to surroundings were both interesting and curious, for everything it did was good in the beginning, but disastrous in the end. An ovarian tumour was, for a time, of immense advantage; it undid the patient's kinks, kept back the bowel, and so afforded comfort; but in the end it killed her. The band which produced the ileal kink at first supported the cæcum, but later it killed the patient, in that it produced a delay of material in the small bowel. He would say that the results of chronic intestinal stasis were divisible under three heads:—(1) Simple mechanical results. By damming back the material in the small intestine a pulling on the duodeno-jejunal junction was effected, and it became kinked. This meant that the duodenum became distended mostly in its first part: the other parts did not distend in anything like the same proportion, because they had the posterior abdominal wall behind them, and were embedded largely in fat and peritoneum. Therefore one would expect that the part to undergo change would be the first part. Then, in order to prevent a regurgitation of material into the stomach there was a spasmodic contraction of the pylorus. That pyloric spasm caused dilatation and hypertrophy of the stomach. The distension of the duodenum resulted in engorgement of the mucous membrane of the duodenum, especially the first part, and there was some hæmorrhage from it; later abrasion, and later still there was ulcer. Later, the heavy stomach caused a tearing strain on the concavity, producing in a similar manner engorgement, abrasion, ulceration, and finally cancer of the mucous membrane. It had struck some people as extraordinary why cancer of the duodenum was so unusual, whereas cancer of the stomach was constantly met with. The reason was that duodenal distension and duodenal ulcer was one condition the physician could cure, and he did so by leaving it alone. When a person was kept on his back the obstruction to the ileal effluent was relieved, and in consequence the abnormal distension of the duodenum ceased to exist, and the ulcer or abrasion tended to heal rapidly. Ulcer of the stomach was a different proposition. There was a spasm of the pylorus, which developed a hypertrophied stomach; and that stomach could not be emptied and freed from strain unless the spasm were relieved. Putting the patient on his back only partially relieved the strain. An ulcer of the stomach is, therefore, more chronic, and sooner or later is more liable to become infected with cancerous organisms. That had to be grasped thoroughly. The next aspect was that the obstructed small intestine was infected by organisms which it did not know how to deal with, and which fouled its contents. It was from the small intestine that all our food was picked up. It was carried to the liver and altered by that organ as far as it could. If the liver had too much to do, the person said his liver was at fault, but the fact was that organ was doing its best, and it was the best friend we have. If there was too much for the liver to do, filth got carried into the circulation. As that process was always going on, we were, more or less, all the subjects of chronic stasis. Following the infection up, it extended into the duodenum, and afterwards into the ducts of the pancreas, setting up the condition known as pancreatitis, usually considered as an independent entity. People said here was pancreatitis, and here was gastro-enteritis, but the fact was that all these processes occurred together. Every case of chronic stasis had an infected pancreas, just as he had an infected common bile duct and gall bladder with later gallstones, cholecystitis and cancer. Of course, the longer it existed the more serious it was. First the pancreas was indurated, then inflamed, and later it became cancerous; they were different chapters in the three-volume novel called "Chronic Intestinal Stasis." Unfortunately, when gallstones are present the surgeon is satisfied to remove them; but he had really left the cause of them, of which he is unaware, untouched. One thing which was extraordinary in the study of intestinal stasis was the different modes in which people reacted to that poison; and that seemed to vary entirely with the colour of the hair. A red-haired person seemed to possess an immunity not enjoyed by a black-haired person. That was borne out by a novel familiar to all, "The Story of Two Constipated Women, or The Light That Failed." No one was more observant than Rudyard Kipling, yet he did not know those women were constipated. The red-haired woman never lost her appetite, whether for food or sexually, and however ill she was she did not seem to give in. Light hair seemed to bespeak enormous powers of resistance, while dark-haired people seemed to give up the struggle almost at once. Nothing caused misery in homes so much as the effects of chronic intestinal stasis, and hence it probably does much to destroy the happiness of married life.

He passed on to the consideration of the second group of effects that results from stasis, namely, auto-intoxication. Poison in the system affected it at an early stage. If one wanted a barometer indicating the degree of stasis in a woman, one had only to feel the upper and outer zone of the left breast. A surgeon would say it was chronic interstitial mastitis. Later, this degenerative condition extended to the right breast and affected the whole of it. If it persisted, that change became cancerous. Except in the case of syphilis, he believed it was impossible for anyone to develop cancer, except in the presence of chronic intestinal stasis.

The thyroid tended to degenerate and to diminish in size at an early stage in this condition, so that in an advanced case it could no longer be detected, and every ring of the trachea could be distinguished by the finger quite easily. The people who suffered from auto-intoxication also lost their fat and the muscles became flaccid, and that spelt disaster to a woman. Her uterus normally was stuck up because of the firmness of its muscular structure and of its supports. It was also largely supported by fat; but bereft of fat and with the muscles flabby, it turned over and sat on the rectum, when it became large, engorged and later inflamed. During defæcation it pressed on the large bowel and increased the difficulty of its evacuation. The gynæcologist only existed because women were static; and much the same applied to the physician and surgeon. The kidneys became mobile for the same reason. At first they did not do much harm, but later the effluent of urine or blood was interfered with, and certain definite changes ensued. The condition of the skin was also of great importance; it was stained brown, became smelly and offensive, and little wrinkles came into it, while in the case of women, hair began to appear in undesirable places.

Dr. James Mackenzie had dealt so fully with the conditions of the heart resulting from auto-intoxication that no further notice was required from him of the details; Mackenzie had had advantages which few consultants could expect to have. The general practitioner did more to move on the surgeon and the physician than anybody else in the world; he was infinitely more important to progress than the specialist, only he did not realise it. The general practitioner lived with his patients, saw them from day to day, whereas the consultant saw a patient for, perhaps, twenty-five minutes. Mackenzie saw that the heart changes met with were due to a poison in the circulation, the poison being the product of chronic intestinal stasis. The extent of a person's belief could not be judged better than by his actions, and recently Dr. Mackenzie sent a patient to Guy's because he believed the heart condition was due to chronic intestinal stasis, which he thought would be benefited by removal of the large bowel. He, Sir Arbuthnot, did that, and now her heart condition had been completely relieved. And if one examined these cases in the way Dr. Jordan would presently show—and Dr. Jordan had been of immense help to him in showing him things he had only suspected, but could not demonstrate—it would be seen that they had changes in the left heart; the aorta was big and bulbous, hypertrophied and atheromatous. The Englishman had a craving to fight the faults of his drainage scheme by always taking exercise, the only reason for that being that he felt fitter when he took exercise. He was really only fighting his drainage scheme. Now we know he need only take paraffin to do that infinitely more effectually and not at the cost of serious damage to his vascular system. There were very few athletes of any degree of physical fitness by the time that they reached their fortieth year; they were only too frequently as static as they could be, they had an aorta of the consistence of leather, and their vessels were hard, so that no insurance company would look at them.

Many diseases of the kidneys also were due to chronic intestinal stasis. The kidney, like the liver, did its best for its owner, but in time it became diseased and had to give up the struggle. The physician called it Bright's disease, and proceeded to divide up the naked eye conditions found at autopsy. But one's concern should be to check the whole process.

He might reasonably be asked what evidence he had for these various statements. He had many friends on whom he had operated. A friend came to him, having seen and been intimate with most of the well-known medical people in town. He was passing quantities of albumen and casts, and was developing signs of uræmia. Dr. Jordan showed that he had a big left heart and aorta, an obstruction in his iliac colon—which some of his surgical friends had consoled him by saying was cancer. He had besides all the changes which result from intestinal stasis in an advanced degree. The patient and he talked the matter over, and he, the speaker, suggested doing a short-circuiting operation. This was done, the physicians making no objection, as they said he had got to die, and the difference would only be a matter of time. That was more than two years and a half ago, and his blood pressure, which at that time was excessive, was now normal; no albumen could be found in his urine, and he was doing 14 or 15 hours' work a day, and was feeling perfectly well. Some physicians believed in drugs, some preferred "watching," and he was not sure that the latter had not the better of it.

He would mention another case. Six days ago he saw a lady who was obviously dying; her pulse was almost imperceptible. She was in the hands of one of the most capable general practitioners he had ever come across, and he was associated with two consultants, one of whom had deservedly a world-wide reputation. The latter was of opinion that the patient was dying of gastro-duodenitis. Another opinion was sought, and that was that there was no gastro-duodenitis, but the patient was dying of pancreatitis, as the physician said he could feel the pancreas. There was no question that the patient had pancreatitis, gastro-duodenitis, and a host of troubles, and it was obvious that dissolution was immediately imminent. It was decided to short-circuit the patient and free the ileal effluent. Up to that time the patient had been vomiting almost incessantly; nothing given to her by mouth or rectum or under the skin did good. She had not vomited in the six days since the operation, and she was still alive, though admittedly when he saw her she had not 24 hours of life left.

He did not believe the profession had any idea of what the future of this line of treatment was going to be. In consequence of the depreciation of the vitality of the tissues by poisonous products organisms got a foot-hold and flourished, which otherwise could not have done so. Unless a person was toxic he could not have what was variously called rheumatoid arthritis or rheumatic gout. If in such a case the large intestine were removed, or the ileum were cleaned up, the case would at once begin a rapid improvement obvious to everybody.

Then in regard to tubercle. For a long time extensive operations were done for tubercle, until the habit was formed of treating surgical tubercle as if it were cancer. He had not now operated upon an advanced case of a tubercular joint for a long time. If such a person did not get well with paraffin—and many did—their drainage scheme should be altered, and then they would recover. In any case, it gave anyone a fighting chance.

Exophthalmic goitre, enlargement of the thyroid, either general or by adenomatous masses, were presumably superadded infections in that the removal of the big bowel had invariably resulted in their disappearance, and apparently in the complete recovery of the patient.

When one came to study the subject, it was astonishing what influence intestinal stasis had in the production of crime; one should note the mental effect of the poison is most remarkable; people who had it were grossly irritable and difficult to live with. He could understand a man preferring to live with a drunken woman rather than a toxic one; a drunken person was occasionally merry, but a toxic person never. When in Chicago a woman was brought to him into whom a man had pumped lead in the shape of seven bullets. They said they were going to destroy the man, but after seeing the woman he, the speaker, advised them to take away the woman's large bowel, and restore happiness to a home, and not waste the man's life.

The operative treatment of the condition consisted of two things: (1) facilitate the passage through the obstructions by means of paraffin and some mechanical support, which by exerting pressure on the abdomen would keep the intestines in place to meet the assumption of the erect posture. (2) Free the ileal effluent by operation, cutting through the ileum, and putting it into the end of the big bowel. There might be some discomfort in a distended cæcum, but his simple rule was that if the intestine was very loose he took it away, and joined the end of the ileum to the end of the big bowel, while if fixed in good position he left it alone.

With regard to the mortality of cases in which this operation was done, he preferred that others should give the figures, as a number of his friends appeared anxious to make out that his mortality was terrific. In order to have a perfectly unbiassed statement of fact, he had asked Dr. Baimbridge, of New York, who was greatly interested in the subject, and had come over from America, to speak on the subject of his statistics, into the question of which he had very carefully gone.

[Note. — The seventeen cases shown and described after the delivery of Sir Arbuthnot Lane's lecture we propose publishing in our next week's impression.—Ed. M.P. and C.]

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Eric Pritchard, M.A., M.D., M.R.C.P., Senior Assistant Physician to the Queen's Hospital for Children; Physician to Out-Patients', City of London Hospital for Diseases of the Chest, Victoria Park; Hon. Physician for Infant Consultation, St. Marylebone General Dispensary, &c. Subject: "Some Common Disorders of Nutrition in Infancy."*

ORIGINAL PAPERS.

REMARKS ON THE LOCALISATION OF INTRACRANIAL TUMOURS. (a)

By T. GILLMAN MOORHEAD, M.D., F.R.C.P.I.,
Physician to the Royal City of Dublin Hospital.

The subject of the localisation of intracranial tumours is so vast that an introductory paper such as this can only attempt to deal with it in the most superficial way.

I propose to plunge *in medias res*, to leave out all historical points, and to attempt to be as practical as possible. I begin with tumours of the frontal lobe, meaning by the term frontal lobe the region of the cerebrum that lies anterior to the pre-central sulcus. Experimental work on this region of the brain has been almost uniformly negative in results. Occasionally visual disturbances and impairment of movement on the opposite side of the body have been noted, but these occurrences have been too inconstant to allow us to conclude that they are anything but accidental. A fairly careful search through the literature enables me to present, however, the following list of symptoms as suggestive of frontal involvement, the classical symptoms of headache, vomiting, and optic neuritis being also present in almost all cases:—

(1) Mental; general obtuseness with recurrent attacks of coma; sometimes irritability, or more often, according to Oppenheim, a tendency to jocularity; the memory is usually much impaired, especially for recent more or less trivial events; the patient is emotional and has lost his sense of decency.

(a) A paper read to introduce a discussion on intracranial tumours.

(2) Tremor of homolateral limbs.

(3) Spasticity of limbs on opposite side due to pressure on motor centres.

(4) Incontinence of urine.

(5) Ataxic gait without change in the reflexes.

(6) Unilateral anosmia, and perhaps unilateral optic neuritis.

In addition pain on pressure over the frontal region, and sometimes an obvious local swelling in the same region has also been noted.

In glancing through this list of symptoms it will be at once noted that the mental ones predominate. According to Hollander, who has recently published a book on the mental symptoms of brain tumours, the frontal lobes are those which are most poorly developed in microcephalic idiots, and in accordance with this view mental symptoms should be expected in most cases of frontal tumours. This is in accordance with popular professional beliefs. The tendency to jocularity seems to be specially pronounced, and such a symptom should always direct the attention to the frontal lobe, especially if combined with loss of memory. The ataxia included in the list was present in the case that I will immediately refer to, and may be so pronounced as to suggest a cerebellar lesion, as in a case of Ferrier's, and as in my own. It has indeed been attributed to a backward pressure on the cerebellum, but such an explanation is to my mind quite unsatisfactory. Anosmia and unilateral optic neuritis if present are most important localising signs.

The following case, though complicated by the existence of a cyst in the occipital lobe, illustrates to some extent the symptoms caused by a frontal growth. The patient, a man, æt. 42, was admitted complaining of headache and of difficulty in walking and standing. Five weeks previously he had fallen in the street, and since then had suffered from headache, had a tendency to vomit, and had felt a difficulty in steering himself properly when walking owing to a tendency to fall to the right. His past history was unimportant. Examination showed a slight spastic condition of the legs, with brisk knee-jerks; there was no ankle clonus, plantar reflexes were normal, and there was no atrophy. The arms were normal, with the exception of a slight amount of inco-ordination on the left side. There was an irregular ataxic gait with tendency to fall backwards and to the right; no sensory disturbance; cranial nerves normal, except that there was optic neuritis, severe on the right side and less marked on the left; there was no nystagmus. The patient's mental condition was at first dull, but later he brightened up, and at times was quite humorous. There was incontinence of urine. The diagnosis seemed to lie between a tumour of the frontal lobe and one of the cerebellum, and owing to the serious condition of the patient it was decided to do a simple decompression operation at once, and to leave the question of removal of the growth for later on. Accordingly Mr. Henry Moore operated, and on turning down a bone flap, a cyst projected into the posterior part of the wound from the occipital region. Enlargement of the wound in this direction enabled a large cyst to be evacuated. Temporary improvement resulted, but the patient after a few days again sank into a dull, almost comatose sleep, which was only partly relieved by opening up the wound, and letting out an accumulation of cerebro-spinal fluid. Intense universal hyperæsthesia developed, so that the slightest touch made him scream out, and soon after signs of cardiac failure developed, and caused death three weeks after the first operation. The autopsy showed a large sarcoma in the right frontal lobe, and a much smaller one, part of which had given origin to the cyst, in the occipital lobe. The unexpected finding of this cyst at operation not unnaturally upset one's views of the case, otherwise the ataxia, the occasional jocularity of manner, the one-sided optic neuritis and the incontinence of urine could not have failed, as they actually did before operation, to suggest involvement of the frontal lobe.

Rolandic Region.—This region may be dealt with briefly: convulsive movements or paralysis of the opposite side of the body, either localised or general, depending on the nature (destructive or irritative) of the lesion, and on its extent, are the symptoms to be expected. Motor aphasia when the lesion is on the left side is also frequently met with. Into the vexed question of localisation of sensation in the Rolandic area it is impossible to enter, but I may say that there is clinical evidence against such localisation. If sensation is impaired, along with motor paresis, and particularly if the power of localisation of sensation is interfered with, a phenonemon characteristic according to Horsley of involvement of sensory fibres above the optic thalamus, it is likely that the motor fibres of the internal capsule are those involved, and not the cortical cells. Tonic spasms of the opposite side will then be present, instead of the epileptiform storms characteristic of cell stimulation. If the internal capsule is involved hemiopia may also be expected, so that the triad of hemiplegia, hemianæsthesia and hemiopia may all be found. Thus in a case of my own some years ago paralysis of the left leg with weakness of the left arm, loss of tactile sensation in the left leg, and loss of the left half of the visual field were associated with a glioma in the posterior part of the right internal capsule. It is only right to add, however, that in two cases of tumour of the corona radiata under the Rolandic area, I have seen epileptiform convulsions, probably resulting from pressure on the Rolandic cells. Before leaving the subject of sensation it may be well to state that the falciform lobe, and particularly the gyrus fornicatus, is still regarded as the cortical site for sensory perceptions.

Parietal Lobe.—Very little can be stated regarding the localisation of tumours in the parietal lobe. Hollander advances the view that the mental condition of melancholia is associated with parietal disease, but fails to my mind to prove his thesis. Hemiopia and ptosis on the opposite side when the angular gyrus has been destroyed have been observed in a minority of cases, but the only sure localising sign is word-blindness, which exists when the inferior parietal lobule of the left side is implicated. The distinction between cortical and sub-cortical word-blindness would involve a discussion too prolonged for this summary, and as the sub-cortical variety is extremely rare, such a discussion would be of little value.

As regards tumours of the *occipital lobe*, still less can be stated. Hemiopia may be present, but more often such tumours are entirely silent, except for the production of the classical symptoms of increased intracranial tension. Even if hemiopia is present, moreover, it is impossible to state in what part of the optic radiations or occipital cortex the lesion is located. Wernicke's pupillary reaction may enable one to prove that the hemiopia is produced by a lesion further back in the visual path than the optic tract, but further than this it is often impossible to go, unless associated symptoms pointing to involvement of the internal capsule are also present.

In the case already described in which a cyst was present in the occipital lobe there was no hemiopia, and it is probable that few if any of the symptoms were actually caused by the occipital growth.

Temporal Lobes.—Hollander, whom I have quoted before, states that ferocity and bulimia are often found in association with temporal lesions. I refer to his work not because I always agree with his conclusions, but because he has attacked the problem of cerebral localisation from the mental aspect and believes that much knowledge may be gained by careful observation of mental peculiarities in patients suffering from intracranial disease. Word deafness, as is well known, is associated with lesions of the upper left temporal convolution, and is the only reliable sign of involvement of the temporal lobe. In one case I have seen in which a temporal tumour was found, subjective gustatory symptoms were present, and such symptoms are always suggestive, but their presence is the exception.

Cerebellum.—In dealing with the diagnosis of cerebellar tumours we approach a part of the brain which, though disappointing from an experimental point of view, yields as a rule definite clinical symptoms when extensively diseased. For a careful analysis of the symptoms of cerebellar tumours we are indebted to Grainger Stewart and Gordon Holmes. Their paper has been most useful to me personally, and I cannot do better than rapidly summarise their results. Headache, occasionally situated over the cerebellum, vomiting and optic neuritis are practically invariably present. Vertigo with a definite sensation of movement of surrounding objects and of the patient himself, and attacks of giddiness are common. Nystagmus is almost invariably present, and this symptom in tumour cases should in my opinion always suggest a localisation of the growth in the posterior cranial fossa. In strictly intra-cerebellar tumours nerve involvement is often absent, but on the other hand facial paresis, and some weakness of the external rectus muscle, and possibly involvement of the sensory and motor fibres of the trigeminal, may be encountered. Obviously also the auditory nerve may be compressed. Weakness of the limb muscles amounting to definite paresis may be found on the side of the lesion, and is usually accompanied by some degree of ataxia. A special form of this ataxia is sometimes seen in an inability to pronate and supinate the forearm on the side of the lesion with rapidity, the power to do this being retained on the opposite side. This symptom I have seen well marked in one case of cerebellar growth. The gait is of the familiar drunken type, with a tendency to deviate towards and to fall towards the side of the lesion. Reflexes are variable, but as a rule are increased, and usually sensory symptoms are absent. When the tumour is in the vermis of the cerebellum, the ataxia is of a more bilateral character and the patient may have a tendency to fall either forwards or backwards.

In extra-cerebellar tumours very similar symptoms may be found, but as a rule there is more evidence of nerve involvement. Deafness and tinnitus aurium may be present. Nystagmus is the rule, and muscular tremor on both sides of the body may be met. On the other hand the homolateral paresis described in cerebellar tumours is often absent, while spastic paralysis of the contra-lateral muscles due to pressure on the motor tracts is not infrequent.

If the *pons* or *medulla* be the site of the growth the diagnosis depends on an intimate knowledge of the cranial nerves that may be involved. I can do no more than point out that in pontine tumours a crossed paralysis, the limbs on one side, and the fifth, sixth and seventh nerves on the other, is most likely to be found, while in medullary tumours paralysis of one side of the tongue and of the opposite side of the body may occur. Wide variations, however, are met with, which will be sufficiently obvious to those who are familiar with the intimate anatomical structure of the pons and medulla. If, for example, the vomiting centre in the medulla be irritated, vomiting may be an early and persistent symptom in a degree more pronounced than can be accounted for by increased intracranial pressure. Again, glycosuria is by no means rare with pontine tumours, and dysphagia with bulbar ones. What I have here stated regarding the pons and medulla applies also to the *crura cerebri*. A knowledge of the anatomy of the crura leads one to expect the so-called Weber syndrome in tumours of one crus, namely, paralysis of the oculo-motor nerve on one side, and of the face, arm and leg on the opposite side, and such a syndrome has comparatively often been observed. When the *corpora quadrigemina* are attacked ataxia of cerebellar type with a tendency to fall forwards, paralysis of one or both trochlear nerves, and possibly also of the oculo-motor nerves, are, according to Williamson, the diagnostic symptoms. Disturbances of vision and of hearing might be expected, but are by no means always present.

I have now briefly skimmed over most of the regions of the brain, and have only left the *central nuclei* and the *corpus callosum* to deal with. Of the former little positive can be said; lesions, either of the *corpus striatum* or of the *optic thalamus* may be entirely latent, or, on the other hand, by involvement of the *internal capsule* may give rise to hemiplegia and hemianæsthesia. Athetoid movements are stated to be specially associated with thalamic lesions, and marked elevation of temperature with those of the corpus striatum, but neither statement can be regarded as more than speculative. As regards the corpus callosum, the absence of other localising signs, hemiplegia on one side, and hemiparesis on the other, are stated to be suggestive, but nothing more can be said. Commonsense will, however, occasionally lead one to an accurate guess, as in a recent case of my own in which a growth of the genu of the corpus callosum pressing on the optic chiasma was diagnosed correctly from the presence of very intense optic neuritis unassociated at first with other signs of intracranial growth. In this case there was a very pronounced intention tremor, with slight general increase of reflexes, so that the case bore a resemblance to disseminated sclerosis. The occurrence later on of headache, the pronounced optic neuritis and the absence of other signs of sclerosis enabled, however, a correct diagnosis to be arrived at.

Of tumours of the *pituitary body* I need not speak, further than to say that over and above the characteristic acromegalic symptoms, headache, vomiting, and optic neuritis with special involvement of the inner half of each retina, are frequently found in acute cases.

In conclusion I may say that in presenting this brief summary I have been compelled to omit all reference to the obvious fact that tumours may involve more than one part of the brain, and also that multiple tumours are by no means uncommon. A remembrance of these facts will help to explain the many difficulties that are encountered in diagnosis. In attempting to present localising signs, moreover, I have perhaps given the impression that a majority of tumours can easily be localised. This is, of course, not the case. Tumours occurring even in such parts of the brain as the Rolandic region may be entirely unaccompanied by localising signs, doubtless owing to their slow growth, and the consequent adaptation of surrounding structures to their presence. Into minute details I have also been unable to go, as to do so would necessitate a preliminary careful anatomical statement regarding the position of the various cranial nerves. I may, perhaps, here, however, state that my experience coincides with others in regarding paralysis of the sixth nerve as comparatively unimportant from a localising point of view. Its long intracranial course in contact with bone renders it peculiarly liable to suffer in all cases of increased intracranial pressure. Lastly, as far as I have seen, Horsley's contention that optic neuritis is most marked on the side of the growth is almost invariably correct, and is a most valuable observation in determining the side of the brain on which, when accurate localisation is impossible, a decompression operation should be performed.

ANÆSTHESIA—INTRATRACHEAL METHODS. (*a*)

By H. EDMUND G. BOYLE, M.R.C.S., L.R.C.P.,

Senior Assistant Anæsthetist and Demonstrator of Anæsthetics to St. Bartholomew's Hospital, London.

INTRATRACHEAL ANÆSTHESIA.

Intratracheal Insufflation of Ether.

Amongst the recent advances that have been made in anæsthetics, the intratracheal insufflation of ether fills a long felt want.

In the past, surgeons were loath to attempt operations which entailed free opening of both pleural cavities, for fear of sudden pneumothorax, and probably death of the patient, and so such operations were left to those men who were able to use negative pressure cabinets. Now, however, thanks to the work of Meltzer, Auer and Elsberg, these cabinets can be dispensed with, and a safe and satisfactory anæsthesia obtained for intrathoracic operations, by means of the intratracheal insufflation of ether.

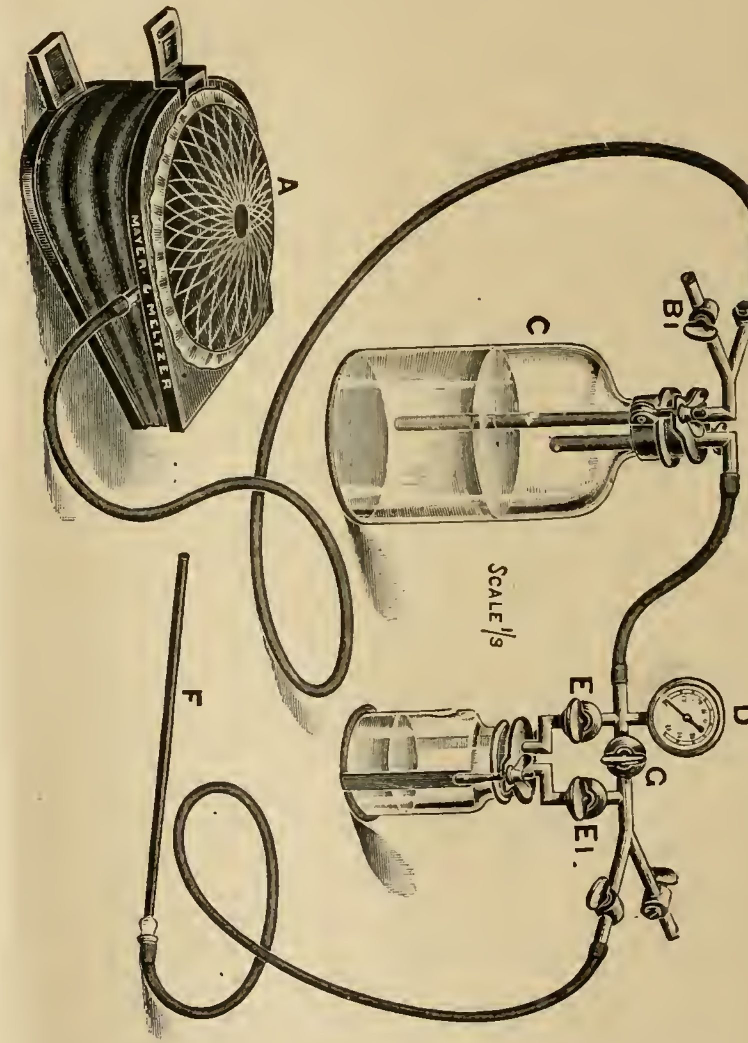
The importance and value of Meltzer's experimental work, and its subsequent adaptation for use in the human subject, cannot be too highly estimated, for it permits of operations being performed, with safety, for the relief of suffering, which were otherwise impracticable.

My interest in this subject was first aroused by my colleague on the surgical staff at St. Bartholomew's Hospital, Mr. George E. Gask. He desired to perform operations within the thorax, and wished me to administer the anæsthetic.

Thanks to the courtesy of Dr. Silk, we were enabled to thoroughly examine an Elsberg apparatus that he had at King's College Hospital, and we came to the conclusion that this was rather large and complicated, so we devised the simple and efficient apparatus which is here depicted, and which I have here for you to see.

The Apparatus.

Air is driven by means of the foot-bellows A through the tap B into the larger bottle C (which contains hot water), then on through tap E over the surface of the ether in the smaller bottle, and so on through EI to the catheter F.



BI is a reserve tap for oxygen, if necessary. The manometer D shows the pressure under which the air is being driven towards the trachea.

The method of administration is as follows:—The patient is first anæsthetised with gas and ether, and a fairly deep anæsthesia obtained. A deep anæthesia is necessary in order to facilitate the introduction of the catheter. My method of introducing the catheter is to pull the tongue forward, pass the index finger over the epiglottis, and then pass the catheter along this finger, and so through the vocal cords. This manipulation requires a certain amount of practice, and I have noticed that my only cases of sore throat after the operation were in patients in whom the introduction of the catheter was very difficult, and in whom, in consequence, there was a good deal of fingering of the epiglottis and the neighbouring parts. As soon as the catheter is in position it is connected up to the exit tube of the apparatus, and air laden with ether vapour is pumped in.

The anæsthesia is light in character, but distinctly good: the corneal reflex is usually present, and the patient keeps a pink colour. Cyanosis,

---

(*a*) Paper read at the International Congress of Medicine, London, August, 1913.

when it occurs (and it is rare) is, I think, due to too large a catheter, but this can easily be remedied by using one of smaller diameter.

The cases that I have anæsthetised by this method differ widely in their character. They include:—

Operations for goitre	12
Intrathoracic operations, including empyema and abscess of lung	8
Œsophagoscopy for removal of tooth plate	1
Ovariotomy and laparotomy, including appendix	7
Excision of kidney	1
Submucous resection of septum nasi ...	1
Amputation of breast	2
Cervical rib	1
Other operations	12
	45

There has been one case of broncho-pneumonia, following an operation for goitre, and one case of bronchitis also after operation for goitre.

Two cases of sore throat, in both of which there was considerable fingering of the epiglottic region.

Although I have only used this method on a comparatively small number of cases, yet they have been sufficient to satisfy me that this method is one of great value; and whilst I do not advocate its use for ordinary cases, I think that for intrathoracic operations, operations on the thyroid gland, and generally for neck operations, it has a future that few of us can estimate.

The easy anæsthesia, the comfort and safety of the patient, both during and after the anæsthetic, must, I think, appeal strongly to all those who have to deal with this branch of the profession.

SOME USES AND ABUSES OF VACCINE THERAPY.

By D. MOORE ALEXANDER M.D.,
Assistant Lecturer in Bacteriology, University, Liverpool;
Medical Officer in Charge of Vaccine Therapy Department,
Royal Southern Hospital, Liverpool.

A Vaccine Therapy Department attached to a hospital serves at least three useful functions. In the first place, it allows the hospital physician and surgeon to clear the beds of subacute and chronic cases by turning them into out-patients; into this category fall those suffering from such conditions as appendix sinuses, surgical tuberculosis, chronic osteomyelitis, chronic bronchitis, pulmonary phthisis with secondary infections, and chronic bacilluria. Secondly, persons suffering from obscure chronic infections may be sent to this department for bacteriological diagnosis. Thirdly, individuals who cannot afford vaccine treatment at home can come as out-patients and obtain an autogenous vaccine or a course of tuberculin without cost.

The following table, showing the nature of the cases treated and the results obtained, concerns the work of the Vaccine Therapy Department of the Royal Southern Hospital for the period of one year, May, 1911, to May, 1912—the first year of its existence.

Organism.	Nature of Case.	Result.			
		No.	Cure.	Improved.	Unaltered.
B. coli (or coliform organism).	Mucus colitis	4	2	1	1
	Appendix sinus	5	4	0	1
	Hydatid sinus	1	1	0	0
	Bacilluria	6	2	0	4
	Total	16	9	1	6
Staphylococcus aureus.	Furunculosis	9	9	0	0
	Septic wounds and chronic skin conditions	5	4	0	1
	Osteomyelitis	7	6	1	0
	Tubercular sinuses	2	2	0	0
	Total	23	21	1	1
Staphylococcus albus.	Chronic urethritis	2	1	1	0
	Acne	1	1	0	0
	Periostitis (thumb)	1	1	0	0
	Otitis media	1	1	0	0
	Total	5	4	1	0
Streptococcus.	Pulmonary phthisis.	1	0	1	0
	Chronic bronchitis	1	0	1	0
	Otitis media	1	0	1	0
	Sinus of arm	1	0	0	1
	Total	4	0	3	1
Gonococcus	Rheumatism	3	0	2	1
	Joints	3	0	3	0
	Total	6	0	5	1
Pneumococcus.	Abscess about shoulder	1	1	0	0
Simple vaccines. Total		55	35	11	9
Staphylococcus aureus & B. pyocyaneus.	Sinus of heel	1	1	0	0
	Lymphangitis arm	1	1	0	0
	Total	2	2	0	0
Staphylococcus aureus & streptococcus.	Chronic pyæmia	2	2	0	0
	Cellulitis of neck	1	1	0	0
	Total	3	3	0	0
B. Friedlander and B. septus.	Chronic bronchitis	1	1	0	0
	Total	1	1	0	0
B. Friedlander and streptococcus.	Chronic bronchitis	6	4	0	2
	Chronic nasal catarrh	1	1	0	0
	Total	7	5	0	2
Mixed Vaccines. Total		13	11	0	2
Tuberculin	Surgical tuberculosis	19	14	5	0
	Pulmonary phthisis.	2	0	1	1
Tuberculin. Total		21	14	6	1
Simple vaccines		55	35	11	9
Mixed vaccines		13	11	0	2
Tuberculin		21	14	6	1
Total for year, May 1911 to May 1912		89	60	17	12

With the exception of the tubercular cases and those suffering from chronic rheumatism and joint lesions of gonococcal origin, conditions in which the preparation of a homologous vaccine is a matter of great difficulty, every case has been treated with an autogenous vaccine. The opsonic index has not been investigated in any case. Dosage has been guided entirely by clinical manifestations, and this has necessitated careful observation of individual reactions, especially at the initiation of a new case. It has been the custom to give the injections on Thursdays, whilst Tuesdays have been used mainly as a dressing-day, upon which the clinical condition of the wound was observed, and also, if necessary, as a supplementary day for inoculations. Hence it was possible to administer a second dose on the fifth, seventh, twelfth, or fourteenth day after. By this means it was possible to gauge the resistance of the individual and to standardise the routine dosage in a short time.

In discussing the results of the table, the most important and the most interesting, comprising the very cases from which the therapist learns the most, are the failures. They are twelve in number, nine of which have been treated with a simple vaccine, two with a mixed vaccine, and one with tuberculin.

The organisms specially concerned consist of the streptococci and the coliform bacilli, from which autogenous vaccines were prepared; gonorrhœal rheumatism and tuberculosis were treated with stock vaccines, and on this account must be placed in a separate class. More time and work has been expended upon the *B. coli* infections than upon all the rest together, and yet this group presents the greatest percentage of failures. The streptococci follow, and at first the connection between such widely differing bacteria is not obvious.

Streptococci occur normally in the mouth in considerable numbers, they are present normally but scantily in the fæces, and many infections of the larynx and lungs are caused by streptococci with or without an associated organism. The coliform organisms inhabit mainly the lower levels of the alimentary system, but appear to pass very easily into the genito-urinary tract, where they produce acute or chronic infections, the usual symptom being a bacilluria, which is commonly a coliuria of intestinal origin.

These two systems, the alimentary and the respiratory, are notoriously the most difficult to treat by immunological methods. The material derived from them, the stool and the sputum, always consists of a complex mixture of organisms, from which it is never easy to isolate the causal germ. When by laborious methods the proper bacterium is isolated and identified and the dosage discovered, the irresponsiveness of these particular tissues, when once injured, prevents advance.

There have been three theories advanced to explain this languid response to stimulus on the part of the intestinal tract and the lungs. One is based upon the idea that the interchange of the products of tissue activities between the dermal and muscular tissues on the one hand and the intestinal mucous membrane and lung epithelium on the other, is slow and at best very meagre. A second hinges upon the first theory, accentuating the fact that neither the respiratory nor the intestinal tissues possess much capacity, as far as is known, for tissue repair or for any great immunological response to stimulus. Thirdly, the blood arriving at these centres of acute metabolism suffers such severe and profound chemical changes that the antibodies it carries may, in the general decomposition and hydrolysis, undergo change also and be rendered ineffective. Whichever be the true view, the fact remains that, as a rule, infections of the digestive tract form a class of case which presents singularly difficult problems to successful vaccine treatment.

The cases of bacilluria, in the light of recent knowledge, may be placed amongst the digestive tract infections, certainly those which are caused by a member of the coli group. It is a common disorder in women, rare in men, and the female anatomy predisposes to intestinal infection of the genito-urinary tract. There must always be a grave suspicion that a bacilluria unaccompanied by pus, bladder, or kidney-cell sediment is an evidence, perhaps the only one at first, of an intestinal lesion and not of an inflammatory disturbance of the genito-urinary tract.

The gonococcal cases have all been disappointing; they were treated with a stock vaccine. A recent case in an acute stage from which the gonococcus was isolated and an autogenous vaccine prepared has, however, reacted rapidly to treatment. The cases of tuberculosis which have been listed amongst the improved cannot all be classed amongst the failures. Only two remain at the present date, in which the improvement has taken place extremely slowly. They have proved refractory to any increase of dose, and finally had to be treated by judicious shortening of the intervals which separated injections of an invariable magnitude.

It is difficult to answer the question whether vaccine treatment as a rule hastens the healing of chronic sinuses and other conditions. The data for a comparison with other methods of treatment are not obtainable; the duration of a discharging sinus depends entirely upon the condition of the individual case, the extent of the lesion, and the nature of the infecting organism. If treated with antiseptic lotions the patient will heal eventually; if carefully dressed and an autogenous vaccine administered the disease is being attacked from within as well as from without. The prognosis of a rapid recovery is favoured if the initial injections produce a good reaction; if little or no reaction can be elicited at the site of the lesion until large doses have been given, progress will be slow. It is not good policy to neglect any aid to treatment, and several stubborn sinuses have been treated with excellent effect with solutions of metaphosphoric acid and of allantoin, which were suggested by Dr. C. J. Macalister. A few sinuses have been induced to heal very suddenly by means of a trick. On the day following the injection of a large dose the discharge greatly increases, diminishes on the second day, and on the third day the sinus is found to be nearly dry. It is then subjected to a vigorous scraping with a sharp spoon, fills with blood, and is then sealed with a collodion plug. Two sinuses, one 1½ ins. deep, the other 2 ins., healed immediately under this treatment; two others were reduced in a week from 4 to 4½ ins. of depth to 1 and 2 ins. respectively. Bier's treatment, lavage with alkaline solutions, attention to the alkalinity of the blood, removal of irritating foci, removal of the possible sources of reinfection—all demand attention and application if the treatment is to produce rapid results.

Success in vaccine treatment depends upon certain factors.

(i.) The condition of the patient's tissues, whether, in fact, they are capable or incapable of response to an immunising stimulus.
(ii.) The identification of, and if possible the preparation of the vaccine from, the causal organism.
(iii.) The correct dosage—depending upon the virulence of the organism and the reactivity of the patient's tissues.
(iv.) The observance of the correct interval between doses, depending upon the response to the dose, the interval and the dose being mutually interdependent.

All failures in vaccine therapy can be attributed to the absence of one or other of these factors or to flagrant transgression of rules founded upon an interpretation of these factors.

(i.) The condition of the patient's tissues is placed first in this list as it is the fundamental factor. If the tissues are poisoned by the toxic products of the infecting organism to such an extent that they have no power of response, vaccine therapy, which depends primarily upon tissue-reaction, is hopeless. The great example of such a tissue state is found in the last stage of malignant endocarditis, and the late recognition of this condition is due to the obscurity of the disease and the difficulties it presents to clinical diagnosis in the early stages. Cannon, the authority upon the bacteriology of the blood, recognises three stages in the process of blood-infection. In the first stage the organisms are shed from some focus—teeth, nose, intestine, or superficial wound—into the blood, causing a rigor, destruction of the bacteria, and clinically an acute but transitory headache and general malaise. In the second stage the weaker organisms die out soon after entering the blood-stream, but the more virulent individuals contrive to exist for some time. The symptoms of this stage consist in a preliminary rigor or shiver, and a later typhoid state which lasts from a few hours or days to a week or ten days, but clears up as the organisms eventually perish. In the third stage, which synchronises with the last stage of the patient, the organisms exist and *develop* in the blood. By this time the tissues are poisoned, the bactericidal powers of the blood itself are depleted, and the picture now is identical with that of a septic endocarditis in its later stages. These three stages may succeed one another, with virulent infections, in a period of hours or days. More usually they require months to produce a fatal result. The rapidity of the sequence depends upon the virulence of the bacterium, the frequency of the incursions of organisms into the blood (if more than one be necessary to produce a fatal result) and the rate at which the patient's resistance declines.

In malaria it is recognised that a rigor signifies the incursion of sporulating parasites into the blood-plasma. Malaria being ruled out, a rigor *always* signifies an incursion of organisms or their toxins into the blood-stream; if this were more generally recognised, malignant endocarditis would be diagnosed earlier. It is hardly possible that it could be diagnosed in Cannon's first stage, but there are not insuperable difficulties to prevent its recognition or, at all events, a suspicion of its presence in the second stage. Diagnosis in the third stage is useless. Again, a high temperature, without a rigor, is generally indicative of the presence of organisms in the blood. The pneumococcus can be obtained by blood-culture in true pneumonia early in the attack, by the same method the typhoid bacillus can be recovered, in the first week of the disease, from 96 per cent. of cases, from 50 per cent. in the second week, and from 16 per cent. in the third week. No working bacteriologist attempts a blood-culture with much hope of success if the temperature be under 101° F. A persistent leucopenia in pneumonia or typhoid conduces to an unfavourable prognosis. Most cases with persistent leucopenia in bacterial diseases—a condition produced *always* and only by the permanence of organisms in the circulating blood—terminate fatally. The leucocytes therefore serve as important evidence for prognosis. They frequently, and this is extremely important, inform the bacteriologist of the worth or worthlessness of vaccine therapy. If the leucopenia alternates with a leucocytosis, that is sufficient evidence to him that the tissues are reacting and that a dose of vaccine may elicit a response. If the leucopenia is permanent and no fluctuations occur in any of the various types of white cells in relation to intermissions of temperature, he can expect little or no response to his injections; the tissues are poisoned beyond hope.

(ii.) The identification of the causal organism is a factor of an importance secondary only to the condition of the tissues. Yet it is the factor which is notoriously and frequently neglected, since it is considered easy to combine the bacteriological diagnosis with the clinical. If it be essential to be certain of the bacterium causing the lesion, it is equally important to keep the diagnosis up to date. Hence this second factor resolves itself into two:

1. An initial bacteriological diagnosis.
2. A periodical bacterial diagnosis.

It may be admitted frankly that the *Staphylococcus aureus* causes most boils and many cases of osteomyelitis and that a stock vaccine produces quite excellent results in many of these cases. It will be admitted that gonococcal infections can be diagnosed clinically and that a stock gonococcal vaccine *rarely* produces any result. But, having admitted the possibility of correct clinical diagnosis in these two infections, there is no other infection (certainly not tubercle) which can with safety and accuracy be diagnosed without the aid of bacteriological methods.

Take, for instance, the connection of the pneumococcus with pneumonia. Most clinicians and all textbooks have considered from time immemorial the acute inflammations of the lung called pneumonia as an evidence, in 90 per cent. of cases, of the pneumococcus; the remaining 10 per cent. may possibly be due to the *Bacillus pneumoniæ*, the influenza bacillus, a streptococcus rarely, the *B. typhosus* seldom, and the *B. pestis* in Oriental countries. The American Commission upon Respiratory Diseases has issued reports, however, prepared by a band of accurate investigators, showing that in only 50 to 60 per cent. of clinical pneumonias does the pneumococcus appear as the causal organism; and clinicians will be ready to admit that only 50 per cent. of their cases are typical.

Therefore, in at least 40 per cent. of pneumonias a pneumococcal vaccine is useless. But pneumococcal vaccines are adminstered right and left in every case of so-called pneumonia, even by mouth, and when no effect is produced the result is not attributed to ignorance but to the utter worthlessness of vaccine therapy.

If the mistaken percentage in pneumonia is 40 per cent. the corresponding number for *B. coli* infections is at least 1,000 per cent. There are four chief reasons, besides innumerable supernumerary reasons, for this. Firstly, the microscopic examination of a smear stained by some simple method has too often been deemed sufficient for the diagnosis of this organism. Even if a double stain be employed and the bacillus in the field prove to be Gram negative, it is not sufficient—there are at least thirty common Gram negative bacilli.

Secondly, the diagnosis of *B. coli* by laboratory tests is at present a matter of dispute amongst bacteriologists themselves. *B. coli* to the water analyst signifies an organism that will pass his two tests; M'Conkey requires four reactions at least, and he has recently extended his tests to six. With six tests, which depend mainly upon the production of acid and gas in sugar media, there may be theoretically 200 odd varieties of the coli group, none of which are true *B. coli*, but which differ from it in one or other small detail; but small and slight though this detail may be, it is frequently sufficient to distinguish between a pathogenic and a non-pathogenic organism. Now, 150 of these varieties have been isolated and described. Is it possible to peer down a microscope and identify which of these 150 is infecting the patient?

Thirdly, if a stock *B. coli* vaccine be supplied, it is a *B. coli* according to the favourite tests of the bacteriologist who prepared it. Again, if it be a polyvalent *B. coli* vaccine, it contains at the outside ten strains of the manufacturer's idea of what *B. coli* ought to be. If a *B. coli* serum be employed, the animal which furnishes it has been immunised with not more than ten or a dozen strains. A blunderbuss was popular in the Georgian era because its orifice was wide and its pellets outnumbered the assailants at whom it was aimed. But the polyvalent vaccine fulfils none of these functions. Its pellets in the case of the coliform organisms are outnumbered by at least fifteen to one, and the 150 of the enemy remain unharmed.

Fourthly, it is easy to isolate members of the coli group from human infections. It is easy to obtain many strains of coli variants from the same case. But it is one of the most difficult things in the world to determine which of the varieties isolated is the organism causing the symptoms. There are complicated methods to aid this diagnosis, but even those fail at times, and the task of preparing the vaccine from the important organism, which unfortunately is not invariably the predominant organism, is one of the most difficult falling to the lot of a bacteriologist.

The summary of the foregoing four paragraphs can be elucidated by the sentence: "There is no such thing as a *B. coli* in human infections." When Escherich in 1860 isolated an organism from an infant's stool, and light-heartedly endowed it with certain characteristics, he little knew what trouble he was storing up for humanity. The *B. coli* (Escherich) seldom occurs as a serious infective agent in men and women. The organisms which produce grave lesions in human beings are the brothers and sisters, cousins and second-cousins, of the original *B. coli*—Metchnikoff terms them the "wild races,"—and it is unwise to speak of *B. coli*, but perfectly safe to speak of a coliform organism.

The streptococci form a group whose members, however, are not so numerous nor so distinct as those of the Coli family. Gordon's differentiation of the various streptococci, by means of the fermentations of special sugar media, has not been confirmed by other observers, but it has been successful up to a certain point in that he has shown that there are four important classes with intermediates. The Germans distinguish three species according to their action upon blood-media. The evidences agree in the existence of different species of streptococci, and this in itself is inimical to the production of beneficial results by stock vaccines. The position here is not, however, so utterly hopeless as the one described under the heading of *B. coli.* The individuals of the streptococcal group cannot be so easily distinguished by chemical tests as were the coliform organisms, though animal inoculations aid in their differentiation. Again, they are few in number. Hence a polyvalent streptococcal vaccine (or serum) has an infinitely better chance of eliciting a beneficial response than any coli serum or vaccine. Streptococcal stock vaccines are rarely given, because there is a valuable serum prepared for this organism. It is used largely and promptly in early and late cases of clinical streptococcal infections. The percentage in which good results have been produced is small compared with the total number of cases so treated. The reason is simple. The clinical diagnosis of a streptococcal infection is not invariably correct.

This denunciation of the indiscriminate use of stock preparations has been confined to those of three organisms: to the pneumococcal vaccine because it is often used in inflammations of the lung *not* caused by the pneumococcus; to the coli vaccine and serum, because they are used as an unknown weapon against an unknown enemy; and to the streptococcal serum because of its hasty use in incompletely diagnosed infections. It would have been easy to extend this list—the *B. influenzæ* vaccine clamours for admission and the tuberculins deserve more than a mention—but space forbids. It is not denied that the stock vaccines of some organisms are useful, but of what use would they be to a man whose knowledge informs him that all pneumonias are pneumococcal, all appendicitis is due to *B. coli,* that there is only one streptococcus, and that the obscure cases require either 606 or tuberculin?

Hence vaccines are given to patients whose tissues are poisoned beyond all power of reaction, and the wrong stock vaccines are administered to those who are in a fit condition to benefit by the proper organism.

(iii. and iv.) The dosage and the interval are so closely bound up the one with the other that they cannot be discussed separately.

The correct dose is, in the first place, individual, and depends upon the reactivity of the patient and the virulence of the organism. Hence all initial doses must be small.

Effective doses are those which may produce a local reaction, and may produce a general reaction, but *do* produce a focal reaction, slight or severe. The interval depends *entirely* upon the focal reaction—local and general reactions are to be ignored in this connection.

By focal reaction is meant the disturbance at the seat of the disease. Local signifies the reaction at the site of injection; general, such symptoms as headache, nausea, rise of temperature, numbness of extremities, etc. The local and the general reactions are by-products. They usually run parallel with the focal reaction; but if they do not, they are to be disregarded in favour of the evidence furnished by the actual diseased spot itself.

It is the custom in a Vaccine Therapy Department to administer doses that will carry the patient over until the following week. Here the interval is subservient to the dose. But occasionally cases are met with in which the maximum dose is attained very early and any increase produces disastrous effects. Successful results can only be obtained in such circumstances by making the dose subservient to the interval. That is to say, the same dose is given with gradually decreasing intervals until finally a larger dose may be adventured. Disregard of this close interco-ordination of dose and interval is the cause of many vaccine failures.

The progression of a case normally synchronises with the progression of the dose, which rarely, except in a few obstinate cases, remains at a *status quo* for any length of time. The motto of vaccine therapy is "progression," and this may signify increase in dosage or diminution of interval; preferably an increase in the dose, since it has been proved that diminution of the interval is not so effective. The doses attained in the treatment of very chronic cases are sometimes very large. A dose of twelve thousand million staphylococci (aureus) has been given to a patient at weekly intervals—in this case no improvement was seen until the six thousand million mark was reached; this parenthetically forms another argument against stock vaccines, which are often stocked in ridiculously small doses. On the other hand, another case infected by the same organism deteriorated without any increase of dose over five hundred million, but progressed when the interval was lessened from seven to four days.

The essential factors upon which the whole system of vaccine therapy rests have been enumerated. It remains to summarise the chief errors that are perpetrated, which undoubtedly furnish the causes of many failures:

1. The want of early and accurate bacteriological diagnosis.
2. The use of stock vaccines in undiagnosed conditions.
3. The administration of vaccines without any regard for (1) the reaction, (2) the interval, and (3) the progression of the patient's immunity.

OPERATING THEATRES.

ST. BARTHOLOMEW'S HOSPITAL.

Appendicostomy.—Mr. D'Arcy Power operated on a domestic servant, æt. 34, who had been admitted for chronic constipation, with a history that six years previously she had been operated on by Mr. Power for acute hæmatemesis due to a gastric ulcer, at the Bolingbroke Hospital. Nine months before admission to St. Bartholomew's Hospital she had been treated for fæcal obstruction, and stated that she had not had a natural motion for three weeks. By enemata, followed by purgatives, the lower bowel was eventualy emptied, and the patient was discharged with a caution to be a little more careful in the future. On re-admission it was found that she had a fresh impaction of fæces, and she stated that in spite of all care she had had great difficulty in getting her bowels opened. Mr. Power therefore performed the operation of appendicostomy; the appendix was drawn out through a gridiron incision in the right iliac region. The base of the appendix was sutured to the peritoneum at the lowest part of the wound by a circular suture of No. 1 silk; the peritoneal and muscular coats of the abdominal incision were closed by catgut sutures. A track was made in the subcutaneus tissue of the abdominal wall, and a small incision was made through the skin at a point two inches below the end of the original incision. A pair of pressure forceps was passed through this small skin incision along the track until it emerged at the lower end of the original wound. The tip of the appendix was seized by the forceps and drawn along the subcutaneous track until it projected through the lower opening. The original incision was then closed, and the distal end of the appendix was secured to the small skin incision by two sutures of No. 1 silk passed through the serous, muscular and submucous coats of the appendix three-quarters of an inch from its apex, care being taken not to injure the vessels in the meso-appendix. The apex of the appendix was then divided on the side furthest away from the meso-appendix in such a way as to open the lumen and yet leave the apex attached to the main body of the appendix. A No. 6 soft rubber catheter was introduced into the appendix until its end lay in the cæcum, the partially detached apex of the appendix being used to steady the organ whilst the catheter was being passed. The first wound was covered with a collodion dressing. The patient was sent back to bed, and it was ordered that she should have oil enemata, and that the large intestine should be irrigated with salt solution through the appendicostomy.

Mr. Power said that the operation of appendicostomy was done more often for chronic inflammation of the large intestine than for chronic constipation. It was, however, a smaller operation than some of the heroic measures which had been recommended, but it remained to be proved whether it was as effectual. Experience has shown that the presence of a small fistula in the iliac region was not productive of much inconvenience in the majority of cases, for after appendicostomy there was a very small amount of discharge, it was not offensive, and did not need frequent dressing. The patient was able to irrigate the whole of the large intestine, and could thus prevent fæcal infection. It was necessary to keep a catheter or a small drainage tube in the opening of the appendix, as, without it, the sinus closed spontaneously. Two to three pints were usually sufficient for an irrigation, and normal saline solution appeared to answer the purpose best. The frequency of the injection must be regulated by the state of the bowels; it may be necessary daily or only once or twice a week.

In this case irrigation was continued daily for three weeks, and by that means the bowels were kept regular. The patient was then discharged from the hospital and was not seen again for exactly two years, when she came saying that she had had no further attack of fæcal impaction, and that she had continued to irrigate at irregular intervals until six weeks ago, when she had taken the tube out and allowed the sinus to heal.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section for the Study of Diseases in Children.

Meeting held Friday, October 24th, 1913.

The President, Dr. Leonard Guthrie, in the Chair.

Dr. C. E. Zundel showed two cases of

INFANTILISM.

The first was a girl, æt. 13. Eldest of three; others healthy. She was very small at birth, and "does not seem to have grown since she was five years old." Condition: Height, 3 ft. 6 in.; weight, 2 st. 10½ lb.; face intelligent; skin dry; hair fair, rather coarse; no suggestion of appearance of puberty. Urine: Acid, pale, specific gravity 1004, contains 1/20 albumin, and a few granular and fatty casts are found in the centrifugalised specimen. No polydipsia; occasional nocturnal eneuresis.

The second case was a boy, æt. 13. Since the age of 2½ years he has had polydipsia. No other illness before or since, but his excessive thirst has been constant. His father and one brother also suffered from diabetes insipidus. Condition: Thin, childish; weight, 2 st. 1½ lb.; height, 3 ft. 6 in.; thymus, thyroid and pituitary gland apparently normal. Drinks on the average 14 pints per diem. Dislikes sweet things; appetite is poor. Urine: Specific gravity 1001, no albumin, no casts, urea 0.5 per cent. Wassermann reaction negative.

Dr. E. A. Cockayne showed a case of

CONSTRICTION OF THE ARM BY AMNIOTIC BANDS.

The patient, a girl, æt. 3½, showed a narrow fibrous band completely encircling the right upper arm, causing slight constriction, and another which deeply constricts the forearm just above the wrist. In flexion—the intra-uterine position—the two scars are at the same level. The scar tissue is adherent to the deeper structures and the bone feels grooved, but a skiagram shows that it is not involved. The right arm and hand are well developed and larger than the left, showing that there has been no pressure on the arteries.

Dr. Cockayne also showed a girl, aged 1 year 4 months, with

HEMIPLEGIA

and a very extensive nævus. The birth was easy, but the child is said to have been "born in convulsions." The mother attributes the condition to her having seen a cripple with a very large birth-mark when she was three months pregnant. The mother noticed the nævus at birth, but is not sure whether the hemiplegia was present then or came on later. It was first noticed after the child had had a severe left-sided fit at the age of six weeks. She has had similar fits at intervals up to the age of one year. There is complete left hemiplegia with spasticity of the arm and leg, and the left side, including the face, is noticeably smaller than the right. There is very extensive port-wine staining of the skin of the scalp, face, arms, legs, and part of the trunk. It is fairly symmetrical and follows a posterior root distribution. Wassermann's reaction is negative.

Dr. Porter Parkinson showed a boy, æt. 5, with

RHEUMATOID ARTHRITIS.

In July, on admission to hospital, he was pale and thin, with wasted muscles. The knees, ankles, wrists and elbows were swollen and spindle-shaped, with soft, pulpy swelling. Enlarged glands could be felt in the axillæ and groins, but the spleen could not be felt and showed no evidence of enlargement. Teeth good; no evidence of gastro-intestinal derangement. Weight, 2 st. 1 lb. Wassermann and von Pirquet's reactions normal. Temperature occasionally up to 100° F. He was treated by massage, etc., a course of arsenic internally, and, later, by rectal injections of polyvalent anti-streptococcus serum, without effect. He left the hospital at the end of July, and on readmission in October, in addition to the conditions described above, there were spindle-shaped enlargements of all the joints of the fingers and slightly of the metacarpo-phalangeal joints of both hands, and the left hip joint had become fixed in partial flexion.

Dr. T. R. Whipman showed three cases of

UNDER-DEVELOPMENT.

(1) A rickety boy, aged 2 years 3 months, who was very undersized, being only 2 ft. high and weighing only 11 lb. The anterior fontanelle is open, and the patient has only seven teeth.

(2) A boy, æt. 8, of diminutive stature, but well-proportioned and intellectually bright. Height, 2 ft. 9 in.; weight, 1 st. 8½ lb. He presents no signs of rickets, but suffers from tuberculosis of the skin and subcutaneous tissues. He has been treated with thyroid extract, and more recently with polyglandin with some improvement.

(3) A girl, æt. 18, showing signs of hyperthyroidism. She has now the development of a girl aged 10, her height being 4 ft. 1½ in., and her weight 4 st. 10½ lb. There is an absence of mammary development, also of both pubic and axillary hair, and menstruation has not occurred. The girl has attended school, but was not quite up to the normal standard and her memory is not good.

Dr. Whipham also showed a girl, æt. 6, with

ENLARGEMENT OF THE LIVER AND SPLEEN ASSOCIATED WITH JAUNDICE.

The patient was born jaundiced, the colour being "green-yellow," and the condition lasted for six weeks. Since then no jaundice has been noticed until February of this year. The onset was sudden, and when the patient was first seen in May she was deeply jaundiced, being of an olive-green colour all over. The liver was greatly enlarged, extending to the umbilicus, and the spleen was also of considerable size, extending down to the same level. The blood-count at this time showed: red corpuscles, 4,824,000 per c.mm.; white cells, 15,200 per c.mm.; polymorphonuclears, 39 per cent.; lymphocytes, small, 13 per cent.; lymphocytes, large, 6 per cent.; eosinophiles, 2 per cent. No myelocytes or mast cells seen. The motions were brown or yellow in colour—not acholic; but the urine was deeply coloured and contained bile pigment. Wassermann reaction negative. After persisting for three months the jaundice has been gradually getting less during the last two months. The liver edge is now 1¾ in. above the umbilicus, but the spleen has slightly increased in size. A recent count shows a change in the blood picture: Red corpuscles, 2,360,000 per c.mm.; white cells, 38,000 per c.mm.; polymorphonuclears, 50 per cent.; lymphocytes, small, 28 per cent.; lymphocytes, large, 4.7 per cent.; myelocytes, 13.3 per cent.; eosinophiles, 3.7 per cent.; mast cells, 2.2 per cent. Nucleated red corpuscles are present, and a few of the myelocytes contain eosinophile granules. Hydropic degeneration of the nucleus is frequent, especially in the myelocytes and the large lymphocytes. The urine is still pigmented and contains bilirubin, but no urobilin.

Dr. Leonard Guthrie showed a case of

CONGENITAL INSUFFICIENCY OF OCULAR AND FACIAL MOVEMENTS

in a boy, æt. 4. At birth imperfect closure of the eyes was noticed and also that the face was devoid of expression. The whole face is motionless as far as the mouth; the skin of the face is smooth and not tightly stretched. The eyes cannot be fully closed, the eyeballs are in mid-position, the only ocular movement is convergence downwards and inwards. Pupils equal and react to light, less so to accommodation. Laughter is only represented by guttural grunts. The orbicularis oris is not paralysed, this being probably due to association of its action with that of the tongue. Electrical reactions cannot be obtained in any of the facial muscles except the orbicularis oris. The condition is regarded as an unusual form of myopathy affecting muscles supplied by the 3rd and the 7th nerves.

Dr. F. Langmead showed a case of "Cretinism." The appearance of the patient, a female child, aged five months, is characteristic. The child was shown because she exhibits two features which are characteristic of mongolian imbecility rather than of cretinism—(1) markedly incurved little fingers, (2) congenital morbus cordis.

Dr. E. Bellingham Smith showed a case of (?) "Cerebellar Encephalitis." The boy, æt. 8, was admitted as a case of cerebrospinal meningitis. July 25th: Sudden onset with headache, vomiting and aching pains. On admission the next day the boy was drowsy, face flushed, rigidity of the neck muscles, and some retraction of the head. The abdomen was retracted, reflexes exaggerated, plantar reflexes extensor, Kernig's sign and ankle clonus well marked. Temperature 103° F. Lumbar puncture revealed a turbid fluid, not under pressure, containing 0.075 per cent. albumin; globulin in a small precipitate. Glucose present, also many polynuclear cells and large lymphocytes. No organisms seen, cultures sterile. On August 8th commencing optic neuritis was noticed, which became more marked. On September 4th fluid from a second lumbar puncture was also sterile. September 9th, no paresis of the limbs, but well-marked ataxia, the inco-ordination being equally present on both sides. On September 15th the patient was put on pot. iod., since when the symptoms have rapidly cleared up, and the child seems now practically well.

Dr. Bellingham Smith also showed a case of "Infantile Paralysis" of early onset and with unusual deformities. The disease attacked the child when only two months old. It is now quite unable to sit up, and usually lies with both knees flexed and the hips abducted so that the thighs lie at right angles to the pelvis. The left leg can be readily brought down into a direct line with the trunk, but the right is incapable of complete inward rotation and abduction.

Dr. Porter Parkinson showed a specimen of "Neoplasmoid of the Sigmoid Flexure" from a boy, æt. 5. When admitted to hospital on July 17th there was a distinct, rounded, movable, tender lump, the size of an orange, in the right iliac fossa. On Sept. 29th, after several motions containing large quantities of blood, the child died. At the necropsy, the lump was found to be a distended sigmoid colon lying in the right iliac fossa and adherent to the adjacent small intestine. The walls of the sigmoid were much thickened with hard, whitish growth, the inner surface being ulcerated. A microscopical section showed largish, rounded, and tailed cells packed in the meshes of fibrous tissue alveoli. In the opinion of Dr. Porter Parkinson and of others the growth is a carcinoma.

Dr. J. D. Rolleston showed a specimen of extensive

DIPHTHERIA OF TRACHEA AND BRONCHI

from a girl, æt. 5. The specimen shows membrane closely adherent to the posterior surface of the epiglottis and interior of the larynx, from the lower end of which a thick continuous tubular cast extends to the bifurcation of the trachea and passes into each of the bronchi.

Dr. F. G. Crookshank showed a skiagram of a case of "Anomalous Development." The lower limbs were small, immobile, and presented webbing between the thigh and the calf. At the *post-mortem* examination it was found that the spinal column terminated at the 12th dorsal vertebra in a bony boss of small size. The spinal canal was completely closed. There were twelve pairs of dorsal nerves, but no lumbar nerves at all; and the legs were, seemingly, not innervated. A very rudimentary sacrum and coccyx were present. For several months before and after the date of the child's conception the mother had been in close daily association with a little boy, paralysed as the result of Pott's disease, who died when the mother was four months pregnant.

Mr. Duncan Fitzwilliams showed a specimen of "Extra-pleural Lipoma" from a child, æt. 6. The case had been shown at a meeting of the section in January as a case of lymphangeioma, resembling hernia of the lung. The swelling gradually became larger, and in September the lump was exposed and removed. It proved to be a pure lipoma with very little fibrous tissue. The portion in the neck communicated by a narrow isthmus growing down behind the subclavian artery with a much larger portion which lay within the thorax outside the parietal pleura. The tumour, which was very soft, was removed whole.

SECTION OF OPHTHALMOLOGY.

MEETING HELD WEDNESDAY, NOV. 5TH, 1913.

The President of the Section, Sir Anderson Critchett, Bart, F.R.C.S., in the Chair.

Mr. Sydney Stephenson showed a case of brawny scleritis at an early stage, which Mr. Treacher Collins thought was tenonitis. He had had a case of this condition, which persisted for a long time, as had this one. Mr. Holmes Spicer reminded the meeting of a case with similar appearance which he showed at a former meeting under the title "solid œdema of conjunctiva." That, however, had a syphilitic origin, which apparently was not the case here.

Dr. Deighton Davies spoke of a case under his care with a similar appearance. A small portion was examined and found to consist of round cells without a stroma. He enucleated, and on bisecting the globe he found a darkly pigmented sarcoma. He suggested the present case was one of sarcoma.

Mr. J. L. Barley showed a case of "keratitis punctata," and Mr. Killick one of complete persistent hyaloid artery.

Mr. A. S. Cobbledick showed an example of "ectasia of the cornea" four years after a perforating wound; and a case of rupture of choroid in a myope following labour. The latter he regarded as unique of its kind.

Mr. Bishop Harman showed a patient with new growth causing detachment; and

Mr. George Coats exhibited a dog with keratitis.

Mr. Chatterton showed a case of

TUBERCULAR IRITIS,

in order to elicit opinions as to the value of tuberculin injections for the condition.

Mr. Browning said he had treated a considerable number of such cases with tuberculin, and he knew of no case in which hæmorrhage had followed its use. The French seemed to think the hæmorrhages in this disease were of tubercular origin.

Mr. Mayou said he had treated numbers of cases of tubercular iritis with tuberculin and had not seen hæmorrhages during the treatment, which resulted in the absorption of the nodules and the subsidence of the iritis. It was the most successful way of treating the disease. He gave tuberculin provided there was no large tubercular lesion elsewhere, such as phthisis. He commenced with 1/10,000th, and worked up to as much as 1/250th T.R. Where lung trouble existed also, 1/100,000th caused severe reaction.

Mr. Macnab said he had recently treated two cases in this way, and both did exceedingly well.

Mr. Arnold Lawson confirmed the experience of other speakers.

Mr. Parsons showed a central unilateral retinitis.

Mr. **Hugh Thompson** showed a case of choroiditis starting as a ring round the macula.

THE LATE MR. NETTLESHIP.

The **President** made sympathetic reference to the death of Mr. Edward Nettleship, which brought a loss not only to the Society, but to the world of ophthalmology. Though evidently in failing health, his mental vigour was such that even as late as the recent International Medical Congress, he took a part in the discussions. His own memory of Mr. Nettleship carried him back to the time when he was curator at Moorfields, and he, Sir Anderson, was senior clinical assistant, and both Mr. Critchett (the speaker's father) and Sir Wm. Bowman had the highest opinion of Mr. Nettleship's knowledge as a pathologist. Yet with all his ability and knowledge he always bore himself with modesty. A resolution of condolence with his family was carried by all present upstanding.

Mr. G. **Coats** read a paper in which he reported some examples of

DISEASE IN THE ANIMAL EYE.

He described a form of keratitis characterised by the presence of a superficial vascular opacity in the cornea. The disease was of long duration, and had no evident association with distemper or other general illness. It sometimes occurred in more than one member of the same litter. Pathologically, it consisted in a replacement of the superficial layers of the cornea by a layer of inflammatory tissue. The human condition which it most nearly resembled was trachomatous pannus, but it differed from that disease in the absence of follicles, and of scarring or distortion of the lid, as well as by its not being confined to the upper part of the cornea. A case of retinal degeneration following distemper was described. The retinal changes were peculiar in that it was the bipolar cells of the inner nuclear layer which were chiefly affected, the ganglion cells showing only slight and probably secondary changes, the outer layers being mostly intact. In places, however, the rods and cones and their nuclei were also atrophic. These changes were most probably to be explained by the presence of a circulating toxine with a specific affinity for the retinal bipolars analogous to the specific action of nicotine on the ganglion cells.

A description of some cases of choroido-retinal degeneration and inflammation was prefaced by a discussion of the pathological points of distinction between these two conditions. A profound atrophy of the retina without adhesion to the choroid must be a degeneration. In old-standing cases of degeneration, however, an adhesion between the two membranes occurred, but it was usually not very intimate; the line of demarcation remained well defined, and the elastic lamina of the choroid was intact. The occurrence of cicatricial tissue was certain proof of precedent inflammation, and where it was present the adhesion was dense and the layers of the choroid and retina were distorted and disorganised, instead of being merely atrophic. A degeneration was often fairly uniform over a considerable area, an inflammation was patchy.

Examples of choroido-retinal degeneration in a dog, raccoon, wolf, wild sheep, ferret, wallaby, and hyæna were shown. The raccoon appeared to be an albino, yet a little pigment was present in the epithelium of the ciliary body and anterior part of the choroid, showing that pure albinism could not be diagnosed without a miscroscopical examination. The raccoon also showed nystagmus, a condition occasionally described in the lower animals. A case of choroiditis, cyclitis and keratitis in a bear, and one of anterior choroiditis in a peccary were also illustrated.

Two instances of canine irido-cyclitis were reported. The first was of plastic type, and was peculiar only in its occurrence in the dog, in which animal the condition appeared to be rare. The second, also in a dog, was characterised by an enormous thickening of the iris, due to infiltration with mononuclear cells of a special type. Posterior synechiæ and other features of plastic iritis were absent. The cause of the irido-cyclitis was obscure in both instances.

The paper was discussed by Mr. **Treacher Collins**, Mr. **Lawford**, Mr. **Sewell** (Veterinary Surgeon), Mr. **Rayner Batten**, Mr. **Bishop Harman**, Mr. **Holmes Spicer**, Mr. **Lang**, Mr. **Cruise** and the **President**, several of which gentlemen had been consulted in regard to animals' eyes; and Mr. **Coats** replied.

Mr. **Charles Wray** read a paper on

OBSTRUCTION OF THE LACHRYMAL DUCT AND ITS TREATMENT.

He believed it was a mistake to remove the sac when syringing failed, without attempting to cure by means of styles, or styles and probing combined, and thought it not unlikely that ectropion and its sequelæ might follow excision. Too much was heard of the satisfactory and immediate results, but too little of bad ones and of recurrences. After referring to the danger of adrenaline and chloroform when used at the same time, stress was laid on Harrison Butler's operation. According to the author, all cases of epiphora should be rhinoscoped, though he admitted he had received little or no help from the rhinologist. The author treated his cases in the following way: He injected cocaine by Mellen's method, and instilled a drop into the conjunctival sac. A Bowman's probe was then passed into the sac, and the point pushed forward under the palpebral ligament. He then cut down on the guide, taking care to note the click of the knife on the probe. So far the procedure was quite painless. He then placed crystals of novocain in the sac, and had recourse to probing. At times, if the stricture was impermeable, he forced a passage through the posterior wall of the duct. A piece of strapping was then placed just below the sac, so that the style when introduced did not press on the skin. A special style—gold-plated, and obtainable from Courlander, of Croydon—was then passed, and the latter was so constructed that when a piece of strapping was placed on its arms it could not move. Whilst it was *in situ*, argyrol 5 per cent. was used three times a day, or such other application as might be desirable. Later, when a firm-edged fistula had formed, the patient was instructed to irrigate the sac three times a day, passing the style at night and taking it out in the morning. To cure the fistula, it could be dilated, and while stretched all the cicatricial tissue cut away, after which the edges of the wound were brought together and covered with collodion. He proceeded to criticise the operations of Toti, Eichen and West. The first of these consisted in making a large open window between the sac and the nose, and as the nose in cases of lachrymal obstruction was so very often diseased, the operation, in his judgment, could scarcely receive the approval of ophthalmic surgeons. And the patient experienced considerable annoyance on blowing his nose, and the operation provided no vertical tube like the duct to carry the flow of tears opposed to the entry of organisms to the sac. Eichen side-tracked the tears to the antrum—*i.e.*, converted this cavity into a pool of stagnant tears. It also had the same objections as those urged against Toti's operation.

West's operation was for obstruction low down in the duct, and consisted in removing its nasal wall. It was better than the two foregoing operations, as some of the duct was left, but it had the serious objection that autolavage and autoprobing were impossible. The aim of the operation was to make a permanent fistula in the middle meatus, but the task of making one in erectile or semi-erectile tissue in a canal the size of a crowquill was almost impossible; and in the event of the duct being kept open by constant probing *via* the nose or canaliculus, the erectile tissue would be so damaged that a fibroid stricture would be bound to follow. He said his object was not so much to attract attention to his own operation as to obtain a formal expression of opinion as to the value of the newer operations of Toti, West and Eichen.

The will of the late Mr. Walter Whitehead, of Colwyn Bay and Manchester, surgeon, has been proved at £176,892 18s. 9d. net.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held Wednesday, November 5th, 1913.

The President, Mr. J. M. Cotterill, in the Chair.

Dr. John Playfair was elected President of the Society.

Mr. Cotterill then delivered his valedictory address, in which he dealt with the work done by the Society during the two years that he had been its president.

Dr. Ninian Bruce gave a communication on

THE SUPRARENAL GLANDS: THEIR COMPARATIVE ANATOMY, PHYSIOLOGY, PATHOLOGY, AND RELATION TO CLINICAL MEDICINE.

After dealing with the comparative anatomy of the suprarenals, Dr. Bruce referred to their rich vascular supply and its explanation in a direct secretion of adrenalin into the blood.

The adrenalin had a very powerful and very rapid action in constricting vessels and raising the blood-pressure. The effect was of very short duration. A repetition of the dose was followed by an identical result. A reduction in the dose was followed by an equivalent reduction in the effect. The effect could be prolonged by perfusing animals with very dilute solutions over a long period. The suprarenals maintained the normal tone of the cardio-vascular system. It acted on the neuro-muscular junctions, and only through the sympathetic system. The effects were similar whether the stimulus was through the sympathetic nerves or by the chemical secretion of the suprarenals. The whole of the sympathetic supply of the cardio-vascular system could be removed, since all the fibres passed through a few ganglia. Animals so treated did not die, but removal of the suprarenals was fatal. The chemical factor was the more important. A condition of suprarenal exhaustion might arise in certain circumstances. If guinea-pigs were killed with diphtheria toxin there was great congestion of their suprarenals. The extracts made from such suprarenals had no effect on the cardio-vascular system of cats.

The change in the suprarenals due to diphtheria was indirect, not specific. A similar exhaustion could be caused by other acute infections, metallic poisons, ricin and extreme fatigue. In Addison's disease the amount of adrenalin supplied to the blood gradually diminished. In acute cases there might be no pigmentation. It was suggested that in diphtheric toxæmia with heart failure, in asthenia after typhoid and influenza, and other conditions, the underlying factor might be suprarenal exhaustion.

Sudden death after removal of half of the thyroid for exophthalmic goitre might be partly due to a simultaneous affection of the suprarenals, and before such operations the blood-pressure should be examined. The treatment of suprarenal inadequacy was chiefly preventive. When it was suspected any increase of fatigue was to be avoided. The great difficulty in the administration of suprarenal was the rapidity with which it was used up. Some means of giving a continuous supply was required.

Dr. Byrom Bramwell said that the pigmentation in Addison's disease might be likened to the eruption of a fever. It might be absent or very slight, and more stress was to be laid on the asthenia. He had always been disappointed in the results of giving suprarenal in Addison's disease, but it was to be remembered that the underlying condition was generally a serious one. At present they were not in a position to accept the theory of suprarenal exhaustion to account for diphtheritic heart failure. There were gross myocardial and nerve lesions in that condition. He did not think that pigmentation in cases of exophthalmic goitre was necessarily evidence of suprarenal disease.

Professor Caird thought the paper embodied a useful piece of experimental pathology which might become applicable to the human subject. The two great difficulties at present were how to know when their patients were in danger of being carried off by suprarenal exhaustion and the evanescence of the substance in the glands after death so that *post-mortem* evidence was not readily available.

Dr. Ker said that anything which would combat heart failure in diphtheria would be an immense boon, but adrenalin in his hands had not been a success.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, October 31st, 1913.

The President, J. O'Carroll, M.D., F.R.C.P.I., in the Chair.

PATHOLOGY AND TREATMENT OF DROPSY, IN RELATION TO COLLOIDS.

The President of the Academy (Dr. Walter Smith) read a paper upon this subject, in which he expounded some recent views upon the causation and pathology of œdema and dropsical effusions. The chief factors of œdema are these:—

(1) Vascular—*i.e.*, blood-vessels and lymph-vessels. (*a*) Increased supply or inflow of transudate; (*b*) obstructed or diminished outflow through (i.) lymphatics, (ii.) veins and capillaries.

(2) Osmotic pressure.

(3) Physico-chemical alterations in the blood.

(4) Alterations in cell nutrition—(*a*) Blood-vessels and lymph-vessels; (*b*) tissue cells; (*c*) nervous influences.

(5) Turgescence of cells.

Special emphasis was laid upon the condition of watery turgescence of cells, and illustrative experiments were shown in favour of the hypothesis of Martin H. Fischer (Cincinnati) that even a very slight degree of, or increase in, acidity leads to turgor of cells.

Renal and cardiac dropsy were respectively discussed, mainly from the colloid chemical point of view, and the bearings of this idea upon treatment were pointed out.

The President remarked that the paper was a most valuable one. Referring to the possibility of œdema occurring without any discoverable fault of the kidneys or heart, he directed attention to a form of acute moderate dropsy met with in alcoholic cases without any sign of renal difficulty when examined by ordinary methods. This condition was found to clear up rapidly after a few days' rest. The rarity of œdema in cases of mitral stenosis, and its frequent occurrence in connection with mitral regurgitation, was a matter of interest. With regard to the evil effect of saline purgatives in Bright's disease, it struck him that possibly it might be that the normal tendency of the kidney to get dropsical itself may be increased by the absorption of the common salt—sulphate of magnesium—which was so often administered in cases of dropsy. He was also struck by the evil effect of normal saline injections in inflammatory conditions, especially in acute pneumonia.

Professor Thompson inquired if all œdema included in the definition meant accumulation of fluid in the tissue spaces. He pointed out that tissue fluid was different from the fluid present in the lymph channels. The inhibition idea was not, he thought, brought home so closely to the circumstances as one would like, and it must be admitted that there were other factors which were potent in causing œdema. Alteration in capillary pressure certainly produced no influence on increase of fluid in tissues, except in the case of the liver. He considered that alteration in the capillary pressure without alteration in the cell walls had no influence in the production of œdema.

Drs. Parsons, Crofton and Bewley also spoke.

Dr. Ellen M. Pickard, M.D.Lond., has been appointed Medical Registrar to the Royal Free Hospital.

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

Meeting held Wednesday, October 29th, 1913.

Dr. Walton Browne (Belfast) in the Chair.

A paper was read by Mr. Adair Dighton (Liverpool) on

SOME INTERESTING CASES TREATED IN A PROVINCIAL CLINIC.

The cases he reported were of cavernous sinus thrombosis, latent cerebellar abscess lightened up by the mastoid operation, osteo-chondroma of the auricle, labyrinthitis and meningitis following polyp extraction and symptomless lateral sinus thrombosis.

This paper was discussed by Mr. Charles Heath, Drs. Walton Browne, Fred Spicer, Coubro Potter and Walker Wood.

A paper by Dr. H. D. McCulloch on

THE THERAPEUTICS OF RADIO-ACTIVE AGENCIES IN DISEASE,

with special reference to the cure of chronic nerve deafness and deaf-mutism, which had previously been circulated among the Fellows, was then discussed.

Dr. McCulloch affirmed his priority in the discovery in 1908 of this method of otological treatment. Adverting to the vast difference that existed between ordinary therapy and radio-therapy, he alluded to the biochemical and biological interactions that occurred in the former, and the purely catabolic physical changes that ensued in the latter. He submitted reasons why the hitherto employed medicinal and mechanical means had failed to remove the underlying cause. He deprecated inflation of the tubes in chronic catarrhal states until resolution had been effected *in situ* by radio-active agencies judiciously employed. Incidentally, he drew attention to the important immunising effect in subacute infections, referring to his previous contributions on that subject and to the amount of corroborative evidence that had since accumulated abroad. He exhibited and described various minute apparatus in the application of radio-active agents, He mentioned his gratifying experience in a typical case of Menière's vertigo, and he drew special attention to the promise of success this method held out in preventing deaf-mutism, the notes of one case being given. The paper was concluded by a tabulated list of 64 cases of hopeless deafness treated by him in 1911.

Dr. Walton Browne drew attention to a case of oto-sclerosis reported at the recent International Otological Congress, markedly benefited by radium. In this case the improvement had been maintained.

Mr. Charles Heath congratulated Dr. McCulloch on his interesting and scientific paper.

Dr. Coubro Potter required further information as to the selective action of the rays. Why did they act on certain cells, the pathological ones, and not on the normal cells. Also he could not quite understand from Dr. McCulloch the particular class of case likely to benefit by the rays. He would also like further clinical evidence to support the claims of improvement by this treatment.

Mr. Adair Dighton discussed the paper entirely from the aural point of view. To commence with, he could not understand how any one method could be expected to cure such diverse conditions as had been given in the paper. Then he strongly objected to the statement that this treatment "promised to be a boon in the prevention of deaf-mutism," as this was not only misleading but on the face of things impossible. Again, he objected to the loose way in which the terms "acquired deaf mute," "chronic deaf mute," etc., had been used—both being unknown conditions.

Mr. Pullin, Drs. Fredk. Spicer and Walker Wood joined in the discussion, the latter stating that he had seen four cases of Dr. McCulloch's, and tested them before and after three months' treatment, and though the hearing had not much improved, there was an improvement.

In reply to Dr. Coubro Potter, Dr. McCulloch said that although it was common knowledge that generally speaking abnormal tissue cells were influenced to the exclusion of normal ones, the term "selective action" could not be scientifically employed. He offered an analogical explanation of a lens and beam of sunlight. In reply to Mr. Pullin and his criticism of Prof. Bragg's view, as compared with Prof. J. J. Thompson's concerning electrons and matter, he appreciated the former. He could not accept Mr. Adair Dighton's definition of the kinds of mutism. In reply to Dr. Frederick Spicer, he said that the prevention of dermatitis in employing radium or mesothorium could only be learned by experience. He offered to demonstrate on a future occasion how this was guarded against in using the X-rays.

Mr. Charles Heath gave a demonstration of the usual methods of

DRAINAGE OF SUPPURATING EARS.

He said that a persistent discharge from an ear is uniformly accompanied by disease in the mastoid antrum, no matter whether the discharge escapes through the tensa or through Shrapnell's portion of the drum-head. He pointed out (and illustrated his statement by moist specimens, diagrams and patients) that when discharge escapes through a perforation in Shrapnell's membrane, the change of route is due to the fact that the channel leading down to the tympanum inside the incus is obstructed by swelling of the mucosa of the inner attic wall, and that if the parts outside the incus (including Prussac's space and Shrapnell's membrane) were not unduly weak and capable of being perforated by the pressure of the pus, complete obstruction and acute mastoiditis would result. He exhibited diagrams of swollen mucous membrane obstructing drainage through the Eustachian tube, the tympanum, the attic and the aditus, and described the symptoms they each produce. One of the patients he exhibited had three weeks previously undergone a conservative mastoid operation for so-called attic suppuration. The disease had existed for two years; there was a perforation in Shrapnell's membrane with a polypus projecting through it; there were deafness to air conduction (a 50-inch watch being inaudible close to the ear), severe pain and vertigo. Since the operation the pain and vertigo had ceased, and the patient could already hear the watch at 4 inches. Mr. Heath stated that he had treated a considerable number of cases with perforation in Shrapnell's membrane, and while upon the operating table they all proved to be cases of mastoid disease draining on the outer side of the incus instead of (as usual) inside it; pathologically they were, therefore, not cases of attic disease at all. He asserted that it is only when discharge from the antrum descends inside the incus that it is able to reach the tympanic cavity and escape thence in the usual way through a perforation in the membrana tensa. He remarked that if the case he had exhibited had been one of epi-tympanic or attic disease as the books erroneously state, his operation upon the mastoid antrum alone would not have given such complete relief as has been afforded. The result proved that the disease was in the antrum, and further, it was observed to be there during the operation. Mr. Heath referred the Fellows to his article in *The Lancet* of April, 1907, where he recorded other cases of this kind, which were afterwards exhibited before the British Laryngological and Otological Society.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 8th, 1913.

Vaccination for Typhoid Fever.

Vaccination, preventive and curative, is now largely employed in France for typhoid fever. All the doctors have received official circulars drawing attention to this new and, as has been proved, effective treatment and stating that a supply of vaccine is at their disposition when necessary.

As a preventive this vaccine will become in time as popular as the Jenner vaccine, and will be freely used for children and adults in periods of epidemics. Last summer a severe outbreak of typhoid fever occurred in the town of Avignon; nearly half the population was vaccinated with the result that the epidemic was stamped out. Naturally severe hygienic measure were taken also.

As to the counter-indications, the anti-typhoid vaccine should not be employed in subjects suffering from any acute or chronic affection; coryza, grippe, tonsillitis, bronchitis, pulmonary or febrile gastric affections, enteritis. Among the chronic affections may be classed tuberculosis, malaria, syphilis, cardiac and renal disease, diabetes.

Generally, says Army Inspector Dr. Schweider, it would be well not to choose a moment of mental fatigue (studies for examinations) or where the patient is debilitated or at the menstrual period of women.

The vaccine is delivered in ampoules of 2, 5, 10, and 20 cubic centimetres. Each ampoule contains a label indicating its origin and the date of its manufacture. The vaccine must be kept in a cold place and away from the light, in this way it maintains its effect over three months.

The syringe used may be that of Pravaz or Luer, but of a capacity, at least, of two and a half cubic centimetres.

The seat of injection is the left shoulder (the right in left-handed persons) behind the posterior edge of the deltoid and two fingers' breadth above the axillary fold. The skin is first painted with iodine, and the liquid injected slowly beneath the skin, under the aponeurosis or into the muscle, and the patient recommended to keep his arm quiet for two hours.

The vaccination requires four injections at intervals of from seven to ten days at the following doses:—

1st injection, half a cubic centimetre.
2nd injection, one cubic centimetre.
3rd injection, a cubic centimetre and a half.
4th injection, two cubic centimetres.

For children these doses will be reduced by one half. A drop of tincture of iodine seals the little orifice.

Although the patients need not interrupt their occupations, certain precautions should be taken, as abstention, the day of inoculation, from all fatigue or excess in eating and drinking. They should be made to understand that they should not consider themselves as immunised until they have received the complete series of injections, and not before twenty days have elapsed since the last injection.

The best time of the day for the injection is from four to six in the afternoon, as if any reaction took place it would pass away unnoticed during sleep.

The duration of the immunisation is not, at the present time, definitely fixed, but it is supposed to cover two years and a half.

As curative treatment, the vaccination influences favourably the course of the malady when employed in the early stage and provided that the spleen is not too much enlarged. Preference should be given to autovaccine, but this is not easy to obtain; the choice rests with the hetero-polyvalent vaccine of Wright. Under its influence the fever goes down slowly but progressively, and convalescence is less prolonged.

Antigonococcic Vaccine.

M. Charles Nicolle, Director of the Pasteur Institute at Tunis, announces his discovery of a vaccine against gonorrhœa. M. Nicolle, who has already made many savant researches on cholera, trachoma, whooping-cough, etc., has been studying for the last year the arduous problem of microbiological treatment of blennorrhagia.

The treatment appears simple: three or four injection every two or three days of two centimetre cubes of a solution containing millions of micrococci. After the first injection pain and general malaise disappear. In chronic cases, the patients are cured after a third or fourth injection, and in acute cases fifteen days suffice for a permanent cure.

But it is in purulent ophthalmia, the cause of so much blindness, that the vaccine of the French savant produces its most wonderful effects. One simple injection cures this dreadful disease.

M. Nicolle, who has treated by his vaccine, with constant success, over 200 cases of gonorrhœa, including several cases of purulent ophthalmia, is about to deliver his secret to the medical world.

Purulent Otitis.

Syringe the ear morning and evening with a warm infusion of tea or camomile. Fill the canal with the following mixture, allowing it to remain ten minutes, the head inclined towards the healthy side. Remove the liquid in excess by a plug of absorbent cotton wool.

Boric acid, 1 dr.
Subnit. of bismuth, 1 dr.
Benzoic acid, 10 gr.
Formal, 3 drops.
Glycerine, 1 oz.

AUSTRIA.

Vienna, Nov. 8th. 1913.

Radium Treatment of Internal Disease.

Radium-therapeutics still continues to be a subject of clinical investigation everywhere, and the influence of that unique element on morbid processes in internal organs gives rise to considerable variety of opinion, as well as of reported observation. Dr. Fritz Kraus (Prague) has just published the results of his very extensive and prolonged researches. He has found that of all forms of internal disorder sciatica responds most favourably to the methods of radium-therapy. Next in order of susceptibility he places the subacute and chronic forms of articular rheumatism. Striking improvement was also shown under the continued application of the influence of the radiations in conditions dependent on arterio-sclerosis, claudicatio intermittens, and angina pectoris; some of the results and sequelæ of cerebral hæmorrhage also underwent very striking improvement. And when, in the treatment of selected cases, the methods of emanation therapy were combined with those of thermo-penetration, the results were found to be highly satisfactory.

Argentum-Therapy in Gonorrhœa of Males.

The Hegonon treatment of quite recent cases of acute blennorrhœa gives very favourable results; the medicament having the great advantages of easy solubility, with complete absence of irritating qualities. The class of cases in which it was found to be most satisfactory by Dr. Ernst Rosenfeld, who has just published his results, were those in which the gonococci were shown by microscopic examination to occupy for the most part an extracellular position in the purulent discharge. In such cases, a completely abortive result was obtained by the injection, three times daily, for three to five days in succession, and for five minutes each time, of a $\frac{1}{4}$ per cent. solution; which was followed in turn, for three to five days, by the use of Janet's fluid, of the strength of 1/3,000 to 1/1,000.

Treatment of Aphasia.

At the recent meeting of the K.k. Gesellschaft in Vienna, the subject of aphasia was discussed by Dr. E. Fröschels, who emphasised the objectionable features of the classification of cases of aphasia according to the Wernicke-Lichtheim scheme, and referred to the expressed views of many authorities, according to which the nerve path for the production of spontaneous speech was not a direct one from the trans-cortex to Broca's centre, but one which passed by the centre for voice production. With regard to the treatment, Dr. Fröschels did not believe that aphasic patients could learn language again through the ear in the absence of a spontaneous regeneration of the speech faculties; so that it is much more essential to approach the senses of sight and touch by showing the patient the movement of the lips in speaking, and making him feel the currents of air. With regard to comprehension of the varieties of aphasia, some important conclusions were drawn from the results of treatment, inasmuch as the subjects of cortical motor aphasia learn to repeat words after another speaker before attaining spontaneous powers of speech, and the condition thus becomes transmuted into a so-called transcortical motor aphasia; this latter variety must be regarded as a retrograde stage or milder form of the cortical. Furthermore, that the symptom-complex of motor aphasia may develop as the result of a partial functional failure of the centre for articulate speech; that is to say, especially when it interrupts the inflowing current of sound images from without; but it does not develop spontaneously. Dr. Fröschels calls this form expressive sensory aphasia, in contradistinction to the receptive sensory aphasia, in which the current of voice-producing images from without is not interrupted.

A Case of Industrial Argyria.

Dr. L. Teleky exhibited a patient who displayed highly developed argyria of industrial origin. The development of the cutaneous stain was due to the fact that he had been engaged for five years (as a *perleneinzieher*) in the production of glass pearls. His employment consisted in the introduction of a freshly-made mixture of silver nitrate solution with milk sugar into glass tubes, from which the glass pearls were afterwards prepared.

HUNGARY.

Budapest, Nov. 8th, 1913.

The Study of Constitutions in Pediatrics.

Dr. Heim Pal remarks that a bird's-eye view of the history of medicine in the last hundred years shows a periodical prevalence and recurrence of medical conceptions which he explains as the result of a periodical prevalence and recurrence of certain constitutional tendencies. They are not passing fashions of thought, but the logical outcome of the conditions that confront practitioners in different decades. The vogue of venesection two generations ago is a typical instance of this; people were shorter, stockier, and more plethoric, and venesection often was urgently indicated. Now the predominance of the lean, the nervous, and the anæmic forbids venesection for the majority of patients although its importance under proper indications is recognised. Not only the conditions of life and hygiene, but also the character of the pathogenic microbes are constantly varying. Children used to thrive on milk, eggs, meat, and butter, and some do so still; but he declares, if we attempt to push such a diet for the children of the present day, fully 70 per cent. will grow thin and pale and lose their appetite. Any attempt to feed such infants with fat, especially the fat of milk, or any over-feeding is liable to be followed by the development of eczema, milk crust, urticaria, prurigo, recurring pharyngitis or coryza, bronchitis, adenoid vegetations, mucous stools, etc. With restriction of the ingestion of fat, the symptoms subside. Finkelstein, of Germany, ascribes this exudative diathesis to defective metabolism, but it is not necessary to go behind the simple fact that these symptoms are elicited by fat in the diet, and tend to subside when the intake of fat is reduced. It is remarkable. Heim continues, that it is the fat of cow's milk which is most injurous; the infants can frequently bear pig fat or cod liver oil much better. He has seen eczema heal under a course of cod liver oil. There is nothing in these children to reveal the tendency to this diathesis until the manifestations develop. In children with the exudative diathesis the reaction to tuberculous infection assumes the familiar picture of scrofula. The larger part of the clinical picture of scrofula is an artificial product, the result of forced feeding with milk, eggs and butter or overfeeding of any kind, and this part of the clinical picture may be eradicated by dieting, while a course of tuberculin may modify for the better the tuberculous element in the syndrome. Scrofula is the exudative diathesis plus tuberculosis. This diathesis modifies likewise the reaction to all other infections. It is an everyday experience that such children take vaccination very hard, and they are particularly susceptible to "children's diseases," especially scarlatina. This disease is less common than measles, as many children seem to be immune to it, and since Czerny's views in regard to the proper diet and treatment of children with exudative diathesis have been practically applied to the children in Breslau by himself and physicians trained in his service, the number of cases of scarlatina in the town has fallen off to a remarkable extent. Heim goes still further and asserts that the severer form of scarlet fever, fatal in three or four days, occurs only in children with the exudative diathesis plus a neuropathic constitutional tendency. Malignant scarlatina is analogous to the fatal driving in of eczema which we now know to be the toxic sepsis of infants with the exudative plus the neuropathic tendency. The latter tendency, he continues, may be recognised by the floating tenth rib and flabby muscles, the general nervousness and unstable temperature. With this tendency alone a change from breast to cow's milk is often beneficial. The change to artificial feeding should generally be reserved for the pure neuropathic constitution. The latter is usually associated with the exudative diathesis, and in this event any fat in the artificial diet will do harm. In these cases the superimposed injurious influence of both diatheses is apparent; no change of diet seems to benefit, and some intercurrent infection is liable to carry off the infant. The indications in these cases are for exclusive or mixed whey or buttermilk diet. Prurigo is a symptom of the exudative diathesis, he says, but the itching reveals the neuropathic tendency, as also the croup and asthma in the laryngitis and bronchitis due to the exudative diathesis. Further research on prevailing constitutional tendencies viewed from a broad outlook will certainly, Heim declares, open a new horizon for successfully influencing the health of the rising generation.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

GLASGOW.

Dr. James A. Adams's Candidature for Assessorship.

Dr. James A. Adams, who has just recently demitted office as President of the Royal Faculty of Physicians and Surgeons of Glasgow, was, on the 29th ult., at the half-yearly meeting of Glasgow University Council, nominated as one of their assessors in the University Court. As the two retiring assessors were also both nominated for re-election and the show of hands taken at the meeting could not be regarded as conclusive, a poll was demanded. Dr. Adams has now issued his address to the electors, the members of Council. In it he points out that while he represents primarily the interests of the graduates in medicine, he is also in touch with the interests of the teaching profession. He refers to the influence of the University over the extra-mural medical colleges and to the proposals concerning the inclusive fee, as to which, however, he does not state his views. Finally, he points out that the medical graduates are inadequately represented as regards numbers in the University Court, and he states that there has long been an impression that scientific and medical research has not been sufficiently encouraged in the University, apparently because the funds at the disposal of the Court have been allocated to less essential purposes. Dr. Adams's candidature will no doubt be supported by the medical profession, and especially by those members of it who have been connected, like him, with the Glasgow Royal Infirmary.

Glasgow Municipal Election.

The medical candidates in Glasgow municipal election met, as was to be expected, with divers luck. In the first place Bailie Dr. Edward McConnell, a tried representative, was returned to the Council without opposition. Another tried representative, however, Dr. James Erskine, was beaten at the polls by an untried candidate. The third medical candidate, Dr. D. McKellar Dewar, was successful in ousting a

Labour or Socialist member of the Council. Dr. Dewar is thus a member of the Council, and the number of medical members is five, as before.

Salaries for Assistant Medical Officers.

At a meeting of the Glasgow Parish Council on the 4th inst., the Chairman, in moving the approval of the minutes of the Chairman's Committee, drew attention to the new scale of Salaries for Assistant Medical Officers. He pointed out that there was a difficulty in getting assistant medical men to fill positions under the Council when vacancies occurred. They all knew, he said, that the Insurance Act had raised the value of medical service very materially, and that it was getting more and more difficult to get any men to accept office at salaries which were to some extent nominal. The Committee had, therefore, after full consideration, resolved to recommend that practically £50 be added to the early salaries when appointments were made.

At the same meeting the Clerk of the Council stated that, notwithstanding the Insurance Act, the outdoor medical staff in the respective districts had still as much work to do as formerly.

Principal Sir Donald Macalister, who has been seriously unwell for some time, is now recovering.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ETHICS OF JOURNALISM.

To the Editor of The Medical Press and Circular.

Sir,—To me it is not at all surprising to find that in the few days which have elapsed since my last letter was written there have appeared a number of glaring illustrations of the facts I referred to. I send enclosed two advertisements from London papers which, as you can avouch, stand in the very front rank of journalism. These advertisements are printed in leader type among editorial matter. One occupies a full column, the other a smaller space. They are both distinguished by the sign "advt." at the foot in very small letters. The longer one belongs to a new development in a form of cruel quackery that has been exposed over and over again. It contains some obvious falsehoods; and if its character were not at once recognisable by astute editors and managers, it ought to have, at least, excited serious suspicion, and ought not to have been printed without inquiry. The shorter advertisement announces a new venture by a foreign impostor who styles himself "doctor." Its author is evidently akin to the class of swindlers of the same type often hailing from the United States who periodically exploit the simple British public. He undertakes to cure with one secret nostrum many groups of symptoms which are often classified under one name, but which are due to a great variety of totally different causes calling for equally varied treatment. A third advertisement which I enclose is from one of the leading provincial papers—a paper of great influence, always quoted among its fellows by its London contemporaries when the opinion of the country at any crisis needs making known. This paper goes one better. It prints a lengthy fraudulent puff among editorial matter without any sign whatever to mark it as a paid advertisement. The medical Press has nothing to do with commercial fraud, albeit doctors, not being business men, are commonly among its victims. It would be well if they could be warned against putting any trust in financial advertisements promising an easy way to wealth. Some time ago a great paper allowed its City editor to expose the character of some of these frauds, whilst at the same time they were being freely advertised in its own pages. I have preserved a copy of this paper.

I am, Sir, yours truly,

Henry Sewill.

The Old Rosery,
Earlswood Common.
November 8th, 1913.

To the Editor of The Medical Press and Circular.

Sir,—Although I have profound admiration for the man who, having unearthed a scandal, harries it as he would a fox that had been continually robbing his hen-roost until it was caught and destroyed, yet I cannot but think your correspondent, Mr. Sewill, might resign his attempts to suppress quackery as a hopeless quest. Not only do the leading newspapers pander to quacks in the most blatant fashion by publishing advertisements of the cruelest frauds on the public as editorial articles for the revenue the practice brings to their coffers, but one cannot pick up even the most reputable of magazines without one's eyes are caught by mendacious statements of the most marvellous so-called cures of blindness, deafness, heart-disease, consumption and the like to which flesh is heir. Unfortunately, the English Press, with a few honourable exceptions, has of late seemed bent on exploiting those illicit sources of income made notorious in their American prototypes, and so long as our Government derives a handsome revenue from the sale of patent medicine stamps, I fear it is a hopeless war to wage even in the public interest.

Recently one has noticed with pleasure that the county of Kent has prohibited the erection of hoardings which have in the past disfigured the fair countryside of the "Garden of England" with their obnoxious announcements of pills and the like cure-all-diseases. But there the movement stops, so far as England is concerned, and were your correspondent to travel across the American continent by train he would find matters still worse, whole tracts of country being literally hidden, and even the trees utilised with advertisements of this nature. Some of these even go so far as to announce that they "don't even ask a cent for the cure," yet their noble self-sacrificing proprietors can afford to pay heavy fees for publishing the intelligence that it has been effected "after the most eminent doctors have failed." Such is the gullibility of the public in this twentieth century of progress!

I am, Sir, yours truly,

A Sympathiser.

November 10th, 1913.

FAITH-HEALING (?) AT UNIVERSITY COLLEGE.

To the Editor of The Medical Press and Circular.

Sir,—*The Times* of November 6th contains a report of a meeting at University College on the previous day "to mark the opening of a medico-psychological clinic in London." Lord Sandwich presided. The following excerpts from his speech will enable your readers to estimate its quality and character. He said that "the mind had an immense power over the body. He did not pretend to medical or surgical science. There were few serious maladies he had treated without success. He might say he had never failed to relieve people in agonies of pain. There were people who dubbed him an impostor, and possibly a liar, but that was a matter of indifference to him, as he knew pain had been alleviated and the sick healed. He had been asked to explain his power, but he had nothing to explain; he only knew what happened. If he was possessed of that power there must be many others possessed of lesser powers of healing." The only medical speaker, Dr. Constance Long, seems to have made no reference whatever to Lord Sandwich's address. No doubt his statement will receive the serious consideration of the scientific and medical staffs of University College and Hospital. The profession surely, if not the public, are entitled to some explanations. Is it proposed to treat serious maladies of which the most prominent symptom may be "agonising pain," without attempting a diagnosis, and merely by relieving the pain by any possible means? It would be easy to name scores of surgical conditions alone in which mere suppression of pain must end in disaster, and often provide simply an euthanasia—lead to a perfectly preventable, albeit painless, death. If it seemed of any use one might feel inclined to urge Lord Sandwich to inquire into the nature of some of the cases of "agonising pain" which might be likely to present themselves at a University College clinic under the direction of "healers" like himself, who "do not pretend to medical or surgical science." In this connection, and in the case of a highly intellectual man like Lord Sandwich, a little learning for once would not be a dangerous thing. It might be an enormous advantage to himself if not to his patients if he would inquire into the nature of some of the cases of severe pain likely to be met with at the proposed clinic. It would not be difficult for Lord Sandwich to learn the nature and origin of the pain, say in such diseases as glaucoma, strangulated hernia, syphilitic gumma and inflammation of bone, cancerous and simple tumours involving nerves, acute appendicitis and gall-stones. With this knowledge he would recognise that medical and surgical science provides methods of diagnosing and relieving or curing a vast number of diseases which could not be dealt with successfully by any other means not purely miraculous. I have tried to confine myself to a mere statement ot facts. These, I think, are more than sufficiently important to claim a place in your pages; and as no point of honour or etiquette seems to call for my signature, I beg to be allowed to subscribe myself

Yours truly,

Scrutator.

London, W., November 7th, 1913.

THE RESTAURANT FLY.

To the Editor of The Medical Press and Circular.

Sir,—May I ask your attention for a moment to a point in practical sanitation that is curiously neglected by most of our sanitary authorities, namely, the presence of flies in restaurants. To the scientific mind there can hardly be a more disgusting object than a fly hovering about a table and from time to time alighting on bread, sugar, sauces, gravy, meat, and so on. The observer knows that the fly, following the instincts and the facts inherent to his life-history, has emerged from the nearest manure heap, or from any decaying garbage, animal or vegetable, which may be in the vicinity. It follows, of course, that the fly may bring to the viands any of the bacteria, pathogenic and non-pathogenic, that abound in fæcal and other forms of filth. Yet this source of danger to the citizen is preventable. Remove the breeding places of the flies and they will cease to reproduce their kind, especially if at the same time they are destroyed wholesale when they have wandered inside buildings. Why is the restaurant-keeper allowed to expose his customers to the annoyance and risk of disease conveyed by flies, when it is possible for him to rid himself of every one of these dangerous little pests by the use of formalin solution and other well recognised means of prevention? Why, indeed, unless it be the reluctance of Health Committees to interfere with the vested interests of licensed restaurants.

In the city of Prague, I learn from a paragraph in the *Daily Graphic* of November 4th, flies are few and far between—an immunity that is attributed to the soundness of sanitary rules and regulations. Why should London be behind Prague in so important an item of health?

Yours truly,

D. Walsh.

Harley Street, W.
November 9th, 1913.

OBITUARY.

DR. E. KNOWLES, OF BIRKENHEAD.

We regret to announce the death of Dr. Edward Knowles, of Church Road, Higher Tranmere, Birkenhead, which took place on the 5th inst. Some six months ago Dr. Knowles had a serious breakdown of health, induced chiefly by prolonged insomnia. He had to give up his practice entirely for the time being, but it was hoped that the rest and change which he sought would enable him to regain his usual robust health. Unfortunately, however, these hopes were not realised, and recently his condition had caused great anxiety to his family and friends. Dr. Knowles, who was a native of Denbigh, qualified as M.B., C.M.Aberd. in 1881, becoming M.D. in 1884. He set up in practice at Birkenhead between thirty and forty years ago. He gradually acquired an extensive connection, and became one of the best-known medical men of the town. For many years he was Medical Officer of the Tranmere district under the Board of Guardians, and also Vaccination Officer. Although frequently urged to become a candidate for the Town Council, he would never consent, the demands of his large practice fully occupying his time.

Dr. Knowles, who was about 60 years of age, leaves a widow and a son and daughter to mourn his loss.

DR. R. D. SWEETING, OF LONDON.

We regret to record the death of Dr. Richard Deane Sweeting, Senior Medical Inspector of the Local Government Board, which took place on November 10th, in London, aged 57. The deceased, who was the son of Dr. Richard Sweeting, of Clapham Park, was born at Nassai, Bahamas. He was educated at Malvern and Oriel College, Oxford. He was Buxton Scholar at the London Hospital, and was called to the Bar by Gray's Inn, of which society he was Holt Scholar in Constitutional Law. Dr. Sweeting had a large experience in public health work, and he was examiner in that subject at both Oxford and Cambridge and also for the Royal Colleges. For ten years he was Medical Superintendent of the Western Fever Hospital, and for twenty years Hon. Treasurer of the Epidemiological Society of London, afterwards becoming Fellow of the Royal Society of Medicine and Vice-President of the Epidemiological Section. In 1890 he joined the Medical Department of the Local Government Board, of which he had served as temporary inspector during the Cholera Survey of 1885-6. Dr. Sweeting, who held the qualifications of M.D.Dub. and D.P.H.Camb., was the author of an essay on the sanitation of public institutions, which obtained the Howard medal and prize of the Royal Statistical Society; also of a memorandum on vaccination, and of various reports and contributions to medical journals. He married in 1883 the daughter of Mr. William Rothery, of Harrogate, and leaves two daughters.

REVIEWS OF BOOKS.

AIDS TO PUBLIC HEALTH. (*a*)

We admire Professor Sommerville's ability to boil down so much information on water, sewage, soil, air and disinfectants. With all respect for the author and his achievement, the alternative title of "Potted Public Health" suggests itself to us. If the suggestion may be ventured, the author was only in a contrary mood during the evolution of some half-dozen pages such as when he wanders into graphic formulæ. The time spent in reading the book for the purpose of this review passed very pleasantly and left no trace whatever of the tired feeling one frequently experinces in perusing works on this rather heavy subject. This book will certainly be treasured by candidates for Diplomas of Public Health; it will also be extremely suggestive to examiners wondering what questions to ask, and nineteen out of every twenty general practitioners who buy it will stroke their chins with thoughtful pleasure as they read it.

PRECIS D'ANESTHESIE LOCALE. (*b*)

As is generally known, spinal and local analgesia are far more extensively employed on the Continent than in this country, where the majority of surgeons have been slow to recognise their advantages. One reason for the difference is that the art of selecting and administering an anæsthetic has with us for many years attained a high level in the hands of specialists, whereas abroad it has been much neglected.

(*a*) "Aids to Public Health" (Students' Aid Series). By David Sommerville, B.A., M.D., D.P.H., Assistant Professor of Hygiene and Public Health, King's College, London. Pp. 146. London: Bailliere, Tindall and Cox. 1913. Price 2s. 6d. net.

(*b*) "Précis d'Anesthésie Locale." Par G. Piquand, ancien chef de clinique à l'Hôtel-Dieu de Paris. Préface de M. le Professeur Paul Reclus. Paris: Société d'Editions Scientifiques et Médicales. 1913.

In his opening chapter, M. Piquand undertakes to compare these methods, but his capacity for so doing may be estimated by his statement: "La technique de la rachi-anesthésie et celle de l'anesthésie générale sont plus délicates, mais on les acquiert une fois pour toutes: elles sont les mêmes dans tous les cas et pour toutes les opérations." Throughout the book there is too much evidence of the usual faults of the enthusiast. For instance, the reiterated assurance that the patient "n'éprouvera aucune douleur" can hardly be accepted as regards many of the complicated operations included, even when, as is often advised, an injection of scopolamine and morphine precedes, and "quelques gouttes d'éther" are administered at the climax.

If, however, the author's bias be constantly borne in mind, the work will be found to be one of considerable value. The general *technique* of regional analgesia, and of local analgesia more strictly so-called, is carefully described, and there follow several chapters (forming the bulk of the work) in which minute instructions are given for its application in a long list of operations, ranging from removal of warts and extraction of teeth to prostatectomy and Cæsarean section. There are numerous excellent diagrams.

The book being well printed on thin, smooth paper contains far more than many volumes of inconvenient size and weight. It should be useful to the consulting surgeon, for it is being gradually realised that by combinations of local (or spinal) analgesia with light anæsthesia one may in certain cases attain far better results than by relying upon either method alone; and it is certain that a thorough knowledge of local analgesia is most desirable for isolated practitioners, whether working in remote country districts, on board ship, or in distant regions of the Empire.

PRACTICAL MEDICINE. (*b*)

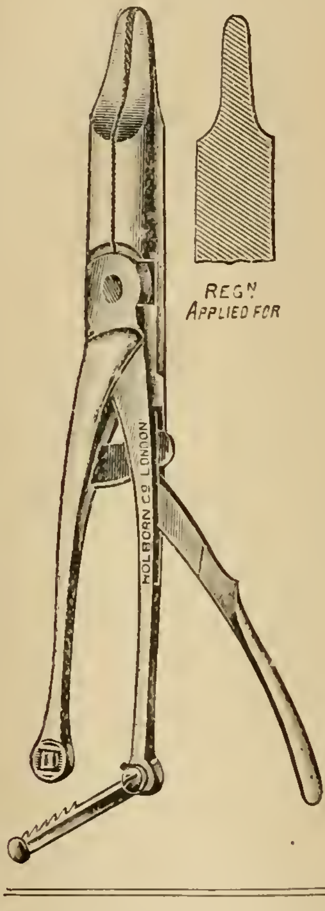
WE have always held that the text-book that best suits the practitioner is unsuitable for the average student, while what satisfies the student as a rule leaves the practitioner's wants unsupplied. The practitioner turns to his text-book to refresh his memory on some point that he has forgotten, or to seek information about some uncommon disease of which perhaps he has just seen a case for the first time. His text-book, to be of use, must supply him with this information and, at least, indicate to him the directions in which he is to look for further light. This being the case, he is apt to judge the book more by what it omits than by what it contains. If he turns to it and it fails to satisfy his want it stands condemned, no matter how much other useful matter it contains. In the student's text-book much may be omitted with advantage, for when what is rare is given with sufficient fulness to satisfy the practitioner, it often merely misleads and confuses the student. The result is the tendency for authors to effect a compromise which is satisfactory to neither party. The book before us illustrates this difficulty of the author. The student preparing for his examinations will be repelled by the mass of material presented to him, while the practitioner will often return from its study with his wants unsatisfied.

PRACTICAL MEDICINE. (*a*)

WHEN a book reaches its fifth edition the work of the reviewer may be said to be at an end; the public has accepted it whether the reviewer likes it or not. When such a book deals with a technical subject and appeals to a public specially educated and qualified to appreciate its subject, there is nothing left for the reviewer to do but to tell the public that a new edition of the book they value has appeared. This duty we hasten to perform, and we feel sure that those who valued the book before will value it more highly in its new dress, and be anxious to recommend it to those who have not previously had the pleasure of reading it. Many will be glad to find that the author has included in this edition the Lumleian Lectures which he delivered before the Royal College of Physicians in 1908. The subject of diseases of the heart is one of absorbing interest, and now when our views on the subject have been again, as it were, cast into the melting pot, the republication of these lectures is most timely. We wish this new edition of Sir James Sawyer's work a similar success to that which the previous editions have well merited.

NEW INVENTIONS.

AN INTESTINAL CRUSHING CLAMP.



"THE crushing lamp here illustrated is one which has been especially made for me by the Holborn Surgical Instrument Company for use during the radical abdomino-perineal operation for cancer of the rectum. The proximal half of the blade is nearly an inch in breadth, in order that the crushed part of the pelvic colon shall be sufficiently wide to permit of easy division between the ligatures. The distal portion of the blade is much narrower, as it is only necessary to crush the meso-colon, for hæmostatic purposes, along the line of division. The advantage of using this clamp is that it greatly minimises the risk of infection when the pelvic colon is divided.

W. ERNEST MILES,
F.R.C.S.Eng."

MEDICAL NEWS IN BRIEF.

The London Lock Hospital.

THE Duke of Devonshire presided at the festival dinner of the London Lock Hospital and Rescue Home, Harrow Road, W., which was held last week at the Whitehall Rooms, Hotel Metropole. Among those present were Lord Kinnaird (Chairman of Committee of Management), Lord Aldenham, Sir Thomas Barlow, Sir Douglas Powell, Mr. J. F. W. Deacon, Sir Malcolm Morris, Sir F. Champneys, Mr. H. S. Littleton, Mr. F. A. Bevan, Sir Clifford Cory, Sir W. Lancaster, Sir A. Pearce Gould, Sir A. Downes, Sir R. Anderson, Sir John Collie, and the Mayor of Paddington.

The Chairman, in proposing the prosperity of the Institution, said it had been called into existence to grapple with a very serious question, and it had been able to do much not only in the way of actually bringing comfort and recovery to the patients, but also in the way of enabling them to start on a new and reformed life. The nature of the evil with which they had to grapple had recently been brought very vividly to public notice, and it was highly satisfactory to gentlemen present that the public conscience had been awakened. A substantial step in advance had been taken in the appointment of the Royal Commission, and any information in the possession of this Institution would be most willingly placed at the disposal of the Commission. The Lock Hospital had to deal not only with a social or a national evil, but an economic evil of far-reaching importance. He asked them to regard any help which was extended to it not only as an act of generosity but as an investment

---

(*a*) "Diseases of Children. A practical Treatise on Diagnosis and Treatment for the use of Students and Practitioners of Medicine." By Benjamin Knox Rachford. 8vo. Pp. xviii. and 783. With vi. plates and 107 illustrations in the text. New York: D. Appleton and Company. 1912. Price 25s. net.

(*b*) "Contributions to Practical Medicine." By Sir James Sawyer, M.D., F.R.C.P. 5th Edition, with many revisions and additions. 8vo. Pp. 410. Birmingham: Cornish Bros. 1912.

as well, for after all could there be any sounder or better investment than the security for national health?

Lord Kinnaird, in responding, said that he was thankful that the conspiracy of silence in connection with that subject was over, and it was now being realised that there was a side of the question which, under the advice of the clergy and ministers, they might judiciously study and see whether they could not in a few years do something to raise the moral tone in reference to that which led to the necessity for a lock hospital.

Sir Thomas Barlow, in proposing the toast of "The Medical Staff," said that the recent advances in the treatment of the particular disease gave them hope of far more radical and far-reaching improvements than they had ever had before.

Mr. J. Ernest Lane, Senior Surgeon, in reply, said that the male lock hospital was now open, and had accommodation for 40 patients. There was however, some difficulty in obtaining funds for furnishing the wards, but, in view of recent developments and the importance of having them ready at once, he had taken upon himself, with the sanction of the Board, the task of furnishing the new hospital. (Hear, hear.)

The Secretary announced contributions to the dinner fund amounting to £5,430, including the Duke of Devonshire's list of £2,487, and Lord Kinnaird's of 1,078. He pointed out that the total debt of the Institution amounted to £9,155.

Medical Mayors.

The following members of the medical profession have been elected or re-elected to the office of Mayor:—Dr. Preston King (Bath); Dr. Hale Puckle (Bishop's Castle); Alderman Dr. J. Robinson (Cardiff); Dr. S. R. Alexander (Faversham); Dr. R. Jones Evans (Pwllheli); Dr. J. Parkinson Atkinson (Saffron Walden); Dr. J. Rafter (Bootle); Dr. H. Foster-Jeffery (Heywood); Dr. W. L. Davies (Llanidloes); Dr. J. L. Davies (Newport, Mon.); Dr. A. W. Limont (Southport); Dr. Collins (Wenlock).

The London School of Tropical Medicine.

It is reported that Mr. Austen Chamberlain has received from the Secretary of State for India a contribution of £500 towards the fund for the enlargement and endowment of the London School of Tropical Medicine. The fund now amounts to £71,276.

Conference of Non-Panel Medical Societies.

An important conference of non-panel medical associations will be held in London at the end of this month, the exact date of which will be given later. The National Medical Union, with the assistance of several leading London societies, is responsible for convening this meeting. Invitations are being issued to all known non-panel bodies, and the chief object of the conference is the promotion of the federation of non-panel organisations throughout the country. The promoters aim at making the meeting representative of all non-service practitioners, and secretaries of all such associations, and all medical men who are not serving under the National Insurance Act are earnestly requested to communicate with the Secretary of the Union, Mr. J. Webster Watts, 5 John Dalton Street, Manchester.

Congress of the Far Eastern Association of Tropical Medicine

At this congress, which was held at Saigon, an interesting collection of medicaments and medical equipments was shown by Messrs. Burroughs Wellcome and Co. This firm has devoted great resources and unsparing effort to accomplish the production of medicinal agents as nearly climate proof as may be. The exceptional suitability of "Tabloid" products for the East is sufficiently demonstrated by the fact that they have been carried by almost every distinguished African explorer since the days of Stanley and Emin Pasha.

Specially interesting to workers in the field of Tropical medicine was "Tabloid" equipment No. 362 for the treatment of cholera, a compact and thoroughly practical outfit for carrying out the method of transfusion of hypertonic saline solutions with which Major Leonard Rogers has obtained such brilliant results. For the emetine treatment of dysentery, which has leapt into prominence largely as a result of the labours of Vedder in the Philippines, and of Rogers in India, the range of "Tabloid" emetine hydrochloride products is supplemented by the provision of "Vaporole" emetine hydrochloride.

"Wellcome" brand tuberculins, vaccines and sera formed an imposing display of products at the Congress of the highest importance in the treatment of diseases of organismal origin, epidemic or otherwise. In addition to the special cholera outfit, No. 362, a variety of "Tabloid" medicine chests and cases and "Tabloid" first-aid equipments was shown.

A Sanatorium for Merthyr Tydvil.

A sanatorium for the Merthyr Tydvil Union, with beds for 35 consumptive patients, erected at Pontsarn by the Merthyr Board of Guardians at a cost of £8,500, was opened last week by Dr. J. L. Ward, of Merthyr. The site was given by the Earl of Plymouth. The Director of the Welsh National Memorial Association said he believed that the 285 beds in sanatoria under the Association would be increased to 500 by this time next year. The 312 hospital beds were all occupied. Mr. J. T. Hughes, Chairman of the Welsh Insurance Commissioners, also spoke.

The Royal Medical Society, Edinburgh.

The office-bearers of this Society, the oldest of its kind in the Empire, if not in the world, have been appointed for this session as follows:—Presidents, W. A. Alexander, M.B., Ch.B. (senior), J. F. C. Haslam, M.B., Ch.B., Sydney Smith, M.B., Ch.B., and J. H. Boag, M.B., Ch.B., Hon. Secretaries, S. C. Huddlestone and P. A. Bennet Clark; Treasurer, Mr. W. Macrae Taylor, F.R.C.S.E.

Royal Automobile Club as a Territorial Hospital.

At the last meeting of the Committee of the Royal Automobile Club, Dr. H. E. B. Bruce-Potter pointed out that in the event of war calling for the mobilisation of the Territorial Forces in this country adequate hospital accommodation would be necessary in London, and it was absolutely essential that all arrangements should be made beforehand, in order that there might be no delay in converting buildings into temporary hospitals. The following resolutions were thereupon passed:—

(a) That in the opinion of this Committe it is desirable that in the event of war calling for the mobilisation of the Territorial Forces in this country, the Royal Automobile Club be handed over to the London County Territorial Association and other analogous bodies to be a general hospital, and this Committee pledges itself to do everything in its power to secure the carrying into effect of this resolution.

(b) That the R.A.C. be No. 3 General Hospital, as that hospital is commanded by Dr. H. E. B. Bruce-Porter, a member of the Committee of the club, who would therefore be in touch with the R.A.C. staff.

Incorporated Association of Hospitals.

At the twelfth session of the Incorporated Association of Hospital Officers, which has for its object the social intercourse of hospital officials, the study of hospital construction, equipment and management, and other matters affecting the duties and responsibilities of hospital officers, the following subjects are down for discussion at the monthly meetings held at 62 Chandos Street, Covent Garden: "Hospital Appointments and the Election of Duly Qualified Candidates," "Suggestions for Adapting the Existing Voluntary System to meet Present Requirements," "Aids to Promotion for Junior Officers," "The Secretarial Department," "The Steward's Department," "Dispensing and the Insurance Act."

A conference has been arranged for March next between the Association and the Poor Law Officers' Association, and the Saturday afternoon visits include the most recently erected hospitals, concluding in June next with a visit to Birmingham and its hospitals.

NOTICES TO CORRESPONDENTS, &c.

☞ **Correspondents** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

SHRIMPS FROM SALT.

Among the latest arrivals at the Zoo is a collection of brine shrimps (Artemia), which, it is stated, were "bred from Tidman's Sea Salt." This may look like a case of spontaneous generation; but Mr. J. T. Cunningham, who bred the shrimps, says the explanation is simple and quite scientific. The sea salt is obtained by evaporation, and the minute shrimps' eggs that were in the salt water, though dried, are still fertile when they find their way into the packets with the salt. They will remain fertile for a considerable time, and it is only necessary to make a solution of the salt of a certain strength, and leave it in a warm place until the eggs are hatched and the shrimps are seen swimming about in the water. It should be emphasised that there need be no fear by users of this salt of their finding themselves bathing among shrimps; the time required to hatch them is far longer than anyone would care to spend in the bathroom.

Dr. P. S. (London, N.E.).—Cottonseed oil is a well-known galactagogue. It is only recently, however, that a suitable extract has been prepared for administration to nursing mothers. The active principle is edestine, a protein body, unusually rich in nitrogen. Lactagol (Ext. Gossypii Sem.) is prepared by Messrs. E. T. Pearson and Co., Ltd., 49 Watling Street, E.C., who will readily furnish free samples and literature to any medical man desirous of testing its action.

Meetings of the Societies, Lectures, &c.

Wednesday, November 12th.

Royal Society of Medicine (Section of Surgery: Sub-section of Proctology) (1 Wimpole Street, W.).—5.30 p.m.: Mr. Aslett Baldwin: (1) Notes of a Case of Round-celled Sarcoma of the Rectum with Microscopic and Macroscopic Specimens; (2) Notes of a Case of Recto-uterine Fistula. Mr. Lockhart Mummery: Case of Hæmorrhagic Proctitis. Specimens: (1) Hyperplastic Tuberculosis of the Colon; (2) Cancer of the Sigmoid. Papers: Mr. Sampson Handley: A New Method of Administering Saline after Abdomino-perineal Excision of the Rectum. Mr. Lockhart Mummery: Hæmorrhagic Proctitis, with cases.

Hunterian Society (London Hospital, Mile End Road, E.).—4 p.m.: Clinical Afternoon.

South-West London Medical Society (Bolingbroke Hospital, Wandsworth Common, S.W.).—9 p.m.: Dr. F. Langmead: Chorea.

Thursday, November 13th.

United Service Medical Society (Royal Naval Medical College, Greenwich).—5 p.m.: Surgeon C. Ross, R.N.: Tubercle in the Navy.

Child Study Society, London (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Dr. M. H. Vaughan: Care of Children under School Age.

North London Medical and Chirurgical Society (Board Room of the Great Northern Central Hospital, Holloway Road, N.).—8.30 p.m.: Clinical Evening.

Friday, November 14th.

Royal Society of Medicine (Clinical Section) (1 Wimpole Street, W.).—8.30 p.m.: Cases by Dr. F. Parkes Weber, Mr. W. J. Midelton, Dr. A. M. Gossage, Dr. A. F. Hertz and Dr. W. Johnson.

Monday, November 17th.

Medical Society of London.—8.30 p.m.: Adjourned discussion on the "Treatment of Neurasthenia." Speakers: Dr. J. Mennell, Dr Claude Fothergill, Mr. Ernest Clarke, Dr. S. A. K. Wilson, Dr. Branson, and others.

Tuesday, November 18th.

Royal Society of Medicine (Section of Therapeutics and Pharmacology).—4.30 p.m.: Paper: Dr. F. Ransom: Diabetic Gangrene and Excretion of Calcium.

Royal Society of Medicine (General Meeting of Fellows).—5 p.m.: Ballot for Candidates for Fellowship.

Royal Society of Medicine (Section of Pathology).—8.30 p.m.: Dr. R. A. Chisolm, Dr. Warren Crowe: The primary Cause of Rheumatoid Arthritis. Dr. E. P. Minett: The Pathogenicity of an Organism Isolated from Non-ulcerating Cancerous Growths (communicated by Dr. J. W. H. Eyre).

Appointments.

Court, A. C. S., M.D., B.S.Edin., Casualty Surgical Officer at University College Hospital.

Dingley, L. A., M.B., B.S., M.R.C.S., L.R.C.P.Lond., House Physician at University College Hospital.

Finlay, D. E., M.B., B.S.Lond., Physician to the Gloucestershire Royal Infirmary.

Hern, John, M.D.Edin., F.R.C.S.Edin., M.R.C.S., in Charge of the Ear, Nose, and Throat Department at Darlington Hospital.

King, G. B., M.R.C.S., L.R.C.P.Lond., House Surgeon at University College Hospital.

Letchworth, T. W., M.B., B.C.Cantab., F.R.C.S.Eng., Ophthalmic Surgeon to Out-patients at the Hampstead and North-West London Hospital.

Moxon, Frank, M.B., B.S.Durh., Honorary Ophthalmic Surgeon to the St. Marylebone General Dispensary.

O'Callaghan, H., M.B., Ch.B., House Surgeon at the Hampstead and North-West London Hospital.

Sanders, W. B., M.B., B.S., Obstetric Assistant at University College Hospital.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Flint (Flint), Matlock (Derby), Warrenpoint (Down), Whitland (Carmarthen).

Farringdon General Dispensary and Lying-in Charity, 17 Bartlett's Buildings, Holborn Circus, E.C.—Resident Medical Officer. Salary £100 per annum, with rooms, attendance, fire, and lighting. Applications to Charles Nelson, Secretary.

Northampton General Hospital.—Senior Resident Medical Officer. Salary £120 per annum, with apartments, board, washing, and attendance. Applications to C. S. Risbee, Secretary-Superintendent.

Bury Infirmary.—Junior House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

City of Manchester Baguley Sanatorium for Treatment of Tuberculosis. Assistant Medical Officer. Salary £200 per annum, with board and residence. Applications to the Chairman of the Hospitals Sub-committee, Public Health Office, Civic Buildings, 1 Mount Street, Manchester.

Births.

Fraser.—On November 3rd, at 2 Cambridge Road, Hastings, the wife of Simon J. C. Fraser. M.D., of a daughter.

Tinne.—On November 7th, at Oak Cottage, Grassendale, Liverpool, the wife of Dr. P. F. Tinne, of a son.

Vernon.—On November 6th, at Wordsworth Lodge, Shirley, Southampton, to Dr. and Mrs. Rupert Vernon—a daughter.

Marriages.

Dick—Wallace.—On November 8th, at Highgate Presbyterian Church, James Reid Dick, M.B., B.C.Cantab., Scarborough, to Davina Orford, daughter of William Wallace, of 5 Broadlands Road, Highgate, N.

Haddow—Shaw.—On November 4th, at All Saints' Church, Woodford Green, London, Archibald Campbell Haddow, M.B., Ch.B., Leeds, to Iris Dorothy, daughter of T. F. Shaw, Esq., Mombassa, and Mrs. Shaw, Bryncyn, Barclay Oval, Woodford Green.

Melrose—Harding.—On November 4th, at St. George's Church, Hanover Square, Surgeon Malcolm M. Melrose, R.N., only son of Chief Inspector of Machinery, James Melrose, C.B., J.P., R.N. (retired), and of Mrs. Melrose, Hayling Island, and Elizabeth Mary (Elsie), eldest daughter of the late Mr. W. Allen Harding, of West Hampstead, and of Mrs. Harding, Moreton Road, Croydon.

Neild—Pruen.—On November 5th, at the Cathedral, Hong Kong, Frederic M. Neild, M.B., of Shanghai, elder son of Dr. Neild, of Tunbridge Wells, to Susan Elizabeth Pruen, second daughter of Dr. and Mrs. Pruen, of Hastings.

Sayers—Hawthorn.—On November 3rd, at St. Michael's Church, Croydon, Surgeon E. B. P. Sayers, R.N., to Dorothy Mayo, youngest daughter of Alfred Mayo Hawthorn, of "Kaliar," South Croydon.

Symns—Sowter.—On November 6th, at All Saints', Notting Hill, James Llewellyn Montfort Symns, B.A., M.B., B.C.Cantab., youngest son of the late Rev. J. E. Symns, M.A., to Claire Hickling Dart Sowter, eldest daughter of John Sowter, of Derby, Civil Servant, retired.

Deaths.

Brighouse.—On November 7th, suddenly, at 93 Tollington Park, London, N., John Brighouse, formerly of Huddersfield, Surgeon, aged 80.

Byramjee.—On November 3rd, at his residence, 3 Rivercourt Road, Ravenscourt Park, Surgeon-Major R. Byramjee, M.D., retired list H.M. Bombay Army, aged 81.

Clendinnen.—On November 6th, at 17 Park Lane, Frederick J. Clendinnen, M.D., of Melbourne, Australia

May.—On November 4th, at 440 Seven Sisters Road, Finsbury Park, Lewis James May, Surgeon, elder son of the late Rev. James L. May, formerly rector of West Putford, North Devon.

Sweeting.—On November 10th, at 7 Fernshaw Mansions, S.W., Richard Deane Sweeting, M.D., Barrister-at-Law, Senior Medical Inspector of H.M. Local Government Board, Whitehall.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, NOVEMBER 19, 1913. NO. 21.

NOTES AND COMMENTS.

The Life of the Panel Doctor. OF all callings, that of the busy medical man in any sphere of practice is one of the most laborious. Among the consultant classes there is the routine hospital work and the necessity of keeping abreast of scientific progress, as well as the actual earning of bread and cheese by ministering to the needs of patients. The work of the panel doctor, on the other hand, is of a kind that leaves little leisure for reflection or study, and is apt to degenerate into a prolonged endeavour to overtake the incessant calls of routine work. If he be a popular man resident in a town he has a crowded surgery to attend to twice a day, with a full list of patients to visit, not to mention an intermittent hail of emergency and night calls. What with the large amount of clerical work required under the Insurance Act, the time available for rest and recreation is whittled away to vanishing point. Well may he wonder why, in order to attain to such a position, he has undergone a long and laborious special education, involving the expenditure of no little energy and self-denial, with an incidental expenditure, probably, of a thousand pounds or more of hard cash. But the outside world that exacts payment from him to the last farthing is wont to appreciate his services on a sentimental rather than on a cash basis: witness the recent outcry against the avarice of a profession that considered forty-eight pence per caput per annum an inadequate sum for medical attendance. Were the gratuitous work lumped into the bargain, at any rate in pre-insurance days, the rate would probably work out at the merest fraction of a farthing per head.

Sir W. Morant on a Day's Panel Work. IF only Members of Parliament could realise the actual conditions of medical practice under the Insurance Act it is probable that future legislation would be of a more generous and sympathetic character. Meanwhile, they might do worse than make a careful study of Sir William's experience of a day's panel work in a Cumberland rural district. A special account of his trip was recently published in the *Pall Mall Gazette*. In the morning of a day chosen at random, he started off with the doctor in his motor-car for hours over hill and dale. Late at night a message came from a distant patient, and Sir William had the novel experience of a motor-boat voyage up Lake Ullswater in a driving storm. This was a fine dramatic finish for the object lesson thus furnished to the head of the Insurance Commissioners. Such an experience can hardly fail to impress upon his mind a lasting visual picture of some of the difficulties of medical work in country practice. It is to be hoped he will not overlook the fact that panel practice in town is not carried on amid romantic environment such as that he found at the foot of Helvellyn. Will Sir William try a day's panel practice, say, in the East End of London, with its morning and evening surgery, its visits in alleys and slums and sordid streets, and, haply, its night with two or three calls to accident and midwifery cases. When one sits down and thinks the matter out it seems incredible that rational men of high skill and education should spend their lives in unceasing and unremunerative toil of this kind. Of all callings that of medicine is most in need of collective protection—call it trades unionism, or any other name you will—some organisation that will enable it to fix its own prices by means of collective bargaining.

The Sandwich Institute. THE appearance of Lord Sandwich amongst the unqualified practitioners of medicine leads one to ask what has become of the Select Committee upon proprietary medicines and kindred matters. Nothing could have been more explicit than the statements of the nobleman in question. His operations were world-wide, and included the treatment of no less than sixty wounded officers in his own country residence. His claims were backed with all the reflected glory of the inauguration of a medico-psychical clinic in a meeting held at University College. It is surely the most unkindest cut of all that this fresh rival of orthodox medicine should be born within the classic walls of University College, London. It is true that a lady doctor, in a speech delivered at the occasion under notice, disclaimed any idea of rivalry with qualified medical practice. The Sandwich way, she explained, was simply complementary and supplementary to it. Her main thesis was that the boon of psychotherapy had hitherto been available only for the rich, but now it was hoped to extend its blessings to the poor. This foreword probably means that a new Institute will be launched ere long for the exploiting of Sandwich methods. Apparently there is no professional body whose duty it is to inquire into and control irregular medical practice of the kind, just as there is no law that deals with it adequately.

Scarlet Fever Convalescence. RECENTLY a police court charge was brought against the medical superintendent and a sister of a fever hospital in the North of England. It was alleged that a boy, aged two years and eight months, an inmate of the hospital, died as the result of a relapse of scarlet fever, due to neglect. It was stated that the boy, because he splashed about, was ordered to the bath-room, where his only choice was between the cold water of the bath and the cold concrete of the floor. The magistrate dismissed the case on the ground that there was not sufficient evidence to send it to trial, and the charge against the superintendant was withdrawn. Without entering into the details of this particular case, it may be desirable to make a few general observations on the treatment of patients convalescing from scarlet fever. First and foremost there is hardly any acute malady that demands more care, especially as regards exposure to cold, than the malady in question. Many a time has it occurred to the writer that the ordinary cross-ventilated ward, with its open windows and ventilators close to the beds, is not scientifically fitted to meet the requirements of the scarlet fever patient. As to cold baths, cold floors, cold passages, thin clothing, insufficient bedding, exposure to draughts, and so on, they are veritable death-traps during convalescence. Comparative mortality statistics of the disease among the rich and among the poor should prove a good deal. Could not the Metropolitan Asylums Board, with its unlimited resources, conduct some investigations with wards specially fitted to protect scarlet fever convalescents from injurious external influences? In view of the heavy scarlet fever mortality tables, such a departure might prove of incalculable value to preventive medicine.

The "Hardy Annuals" at the R.C.S.Eng.

THE "hardy annual" reform resolutions will be brought forward tomorrow at the English College of Surgeons in Lincoln's Inn Fields. They are of the usual drastic nature, and the fact that they appear year after year bears testimony to the spirit of hopefulness and perseverance that are the hall-mark of the true reformer. The following resolution will be moved by Dr. J. Brindley-James: "That this twenty-ninth annual meeting of Fellows and Members again affirms the desirability of admitting Members to direct representation on the Council of the College, which as now constituted only represents those Members who also hold the Fellowship; and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation." This motion will also be supported by Sir Victor Horsley, F.R.C.S.Eng., Dr. J. Oldfield, Dr. F. W. Collingwood, and others. It is stated that there are over 17,000 Members, but less than 2,000 Fellows of the College, the former contributing over £10,000 a year to the College funds, while the latter contribute less than £3,500. It will be interesting to see whether the old-time controversy, which has raged for over a quarter of a century, will meet with anything like a settlement this year. It may be assumed, however, that in the absence of the President of the College any drastic change in its constitution of the nature contemplated is hardly likely to be perpetrated at the meeting on Thursday.

LEADING ARTICLES.

THE SCARLET FEVER EPIDEMIC IN LONDON.

AT the present moment London is suffering from a heavy outbreak of scarlet fever. The official returns show that at the end of last week there were no less than 3,699 scarlet fever and 1,141 diphtheria patients in the eleven hospitals under the control of the Metropolitan Asylums Board, as against 2,354 and 869 in the corresponding period of last year. These figures illustrate in a striking fashion the Herculean task and the huge responsibility devolving on the body which undertakes the duty of dealing with the infectious disease of London. It is almost appalling to think of what must have happened in the days before there was any public safeguard in existence such as that provided by the Board with its manifold weapons of notification, ambulance transport, isolation, skilled medical supervision and nursing, disinfection, and so on. To some extent the risks and dangers of the earlier days are being reproduced at the present moment. It is announced that, owing to a shortage of nurses, it is impossible to accommodate all the scarlet fever cases in the special fever hospitals of the metropolis. This fact is of serious import in face of the present epidemic. It should render the public more than ever alive to the necessity of early recognition of the disease and of the value of antiseptics in the disinfection of clothing and other articles of environment that have been exposed to one of the most subtle and rapid of all infections that attack the human body. The present, indeed, is a peculiarly apt moment for the issuing of skilled advice to the public as to the most trustworthy antiseptics available for this purpose and the method of application as regards the individual patient on the one hand and his environment on the other. From a scientific point of view, it is much to be regretted that as yet no sound curative remedy has yet been discovered. In all probability, however, the near future will disclose some form of serum or vaccine therapy which will have a prophylactic as well as a curative value. This aspect of the disease might well be made an object of thorough investigation by the scientific staff of the Metropolitan Asylums Board. Of all communicable diseases scarlet fever is one of the most formidable, partly on account of its brief period of incubation and its extreme infectivity, and partly on account of its direct and indirect mortality rates. It is not a little curious that in so common a disease the precise conditions of infection are not fully established. There is, we believe, for instance, at the present time no general scientific agreement as to whether the virus is spread by the desquamations of a patient in the "peeling" stage. It is to be hoped that practical sanitarians will find means of coping effectively with scarlet fever, as they have done in the case of cholera and small-pox.

WHAT OF WISBECH?

THE host of difficulties that have beset the introduction of the National Insurance Act is hardly surprising, when the novelty and the far-reaching scope of that new species of social legislation is taken into consideration. At the outset Mr. Lloyd George ran full tilt into the ranks of the medical profession. For the time being he has left them more or less discomfited, but it is hardly likely that any large section of educated Englishmen will allow themselves to be exploited permanently by any Government. Under wise guidance there may even now be some sort of prospect that matters will settle down and the relations between the State and the medical profession be reduced to a reasonably harmonious basis. A desirable outcome of the kind, however, presupposes a wise and just administration of the Act. Should the Chancellor of the Exchequer and his colleagues adopt a harsh and arbitrary attitude they may not improbably find themselves ere long embarked on a bitter and protracted struggle, from which it is hardly likely that the State, even if it emerged the victor, would add materially to its credit or renown. There are various directions in which it is desirable that prompt official action should be taken. First there is the crucial question as to whether the certificates of herbalists, Christian scientists, faith-healers, and other unqualified practitioners should be accepted for insurance purposes. As the State is responsible for the institution of duly qualified medical practice, it seems incredible that it would thus indirectly sanction gross forms of unqualified practice. Then comes the tragedy of Wisbech. The fight with the medical profession was waged there bitterly. Later came the unhappy death of the imported panel doctor at the moment when he should have been on his defence in a trial for libel against a local medical man. Instead of attempting to allay the storm somewhat by approving a local practitioner in place of the one who died, the local Committee have imported another man—and have thereby declined to hold out the olive branch. Then there is the position of Dr. Meacock, the gentleman who was prosecuting the deceased panel doctor. As the matter did not come to trial he has had no opportunity of defending himself against the scurrilous charges to which he has been subjected. The Isle of Ely Insurance Committee, in which these events took place, declined to request the Insurance Commissioners to conduct an inquiry into the whole affair. The British Medical Association, to its credit be it said, has petitioned the Home Office asking for a special enquiry. So far no answer has been vouchsafed. Surely, no fair-minded Government Department could refuse a request of that kind, to which we take this opportunity of formally and emphatically drawing the attention of Mr. Lloyd George and his colleagues.

CURRENT TOPICS.

Glassworkers and Cataract.

During the last six years some experiments have been made by Sir William Crookes with a view of providing protective glasses to prevent damage to the eyesight of glassworkers and others exposed to severe glare. These were detailed last week at a meeting of the Royal Society. It was explained that the problem was to find a means of cutting off the heat rays that are known to be very injurious to the eyes of glass workers, in some cases predisposing to, if not actually causing, cataract. The experiments had been conducted by mixing various metallic oxides with soda glass. The metals employed for the purpose had been cerium, chromium, cobalt, copper, iron, lead, manganese, neodymium, nickel, praseodymium, and uranium. Each specimen of glass found was cut and polished in plates two millimetres thick. The glass was tested by the spectroscope to determine which of the light rays were cut off, and by a specially devised instrument to find out what proportion of heat rays was arrested. Sir William Crookes announced that he had succeeded in preparing a glass that cut off the chemical, the ultra-violet, and the heat rays, but he could not avoid some light rays being also cut off. It was not an advantage to have absolutely colourless glass, because a very bright light, such as that got from white cliffs, expanses of snow, and electric light, was known to be injurious to the eye, and therefore a tinted glass combining good obstruction to heat radiation and to ultra-violet rays was the best to aim for. He had been able to produce glasses which cut off over 90 per cent. of heat radiation, which were opaque to the invisible ultra-violet rays, and were sufficiently free from colour to be capable of use as spectacles. Several glasses of the type described were demonstrated to the Society, showing how a neutral tint could be produced by making use of both cobalt and nickel. In the course of the discussion that followed attention was drawn to the influence of the presence of potassium in glass in modifying the colours caused by the admixture of nickel oxide, and in replying Sir William Crookes said that while the foreman of a works to which some of the glasses had been sent had appreciated them the workmen refused absolutely to wear them. A great boon will have been conferred upon an important body of operatives if a grave eye affection, such as cataract, can be obviated by such simple means as the wearing of appropriate glasses.

Examinations and Examiners.

In Sir William Osler's introductory address at St. George's Hospital Medical School on examinations and their appendages—examiners and examinees, he mentions a number of obvious facts, which, as usual, are habitually ignored by those who could make practical recognition of them if they only chose to do so. As things are at present examinations are an end and not a means. The student has no time to learn anything about a subject till he has passed his examination in it, and this passing depends almost as much on grasping the personality of the examiner as on a knowledge of the subject. Written papers, on which so many desirable marks depend, can be squared in many ways well known to the expert examinationist. Of course, such skill requires at least as high a quality of intelligence as is needed to obtain a pass mark by simple study, and this is to a certain extent a safeguard, as the examination often gives the student a sufficient interest in the subject to tempt him to dip further into it. For all that our present system of testing knowledge rather than ability is not sound, but it is hard to see any practical way that would not lay itself open to even greater abuse.

General Paralysis in the Light of Modern Research.

Few observations in neurology are of such practical importance as the recent demonstration by Noguchi of the presence of the Spirochæta pallida in the brain in cases of general paralysis. Hitherto, the Wassermann test had been found positive by competent observers in nearly one hundred per cent. of general paralytics. This affection, formerly classed as "parasyphilitic," and often referred to as "parasyphilis," Dr. F. W. Mott, in a recent address delivered at Birmingham at the inaugural meeting of the Midland Medical Society, suggests should be superseded by the term *parenchymatous syphilis.* The use of the ultramicroscope and the Indian ink method of Burri, or the silver method of Fontana, have now made it possible to observe the parasite in the cerebral tissues, even though it may be necessary to go through the labour of examining all the convolutions of the cortex systematically, as Marie, Levaditi, and others, declare. As Dr. Mott remarked, the search for spirochætes in the brain resembles the proverbial hunt for a needle in a haystack, and failure to find them by no means disproves their existence. Possibly the transformation of the spiral form of the parasite into another stage, such as the granule or spore, as observed by Noguchi and McDonagh, may have put observers off the scent for a time. At any rate, it appears that the most recent researches suggest that the active development of spirochætes may lead to the production of toxins which gradually cause degeneration of the neurones. Timely treatment by salvarsan until the Wassermann reaction is rendered negative must now be regarded as the best method of dealing with this fatal form of parenchymatous syphilis.

A New Theory Regarding Diarrhœa.

The *Boston Medical and Surgical Journal* describes a physician's method of treating diarrhœa. He uses common or garden vegetables. "Spinach, turnip greens and mustard tops" are the drugs he pins his faith to. The doses are hardly heroic. "A tablespoonful or more" four times a day for one or two weeks suffices, with a little dry toast, "unless the patients become very anxious for more food." We surmise that most of them do. How far the treatment is responsible for results we have no means of knowing. It seems probable that the author raises an incident to the dignity of a cause. Most of us use green vegetables to the prescribed bounds occasionally and find that such use or omission has no very decisive effect on the internal economy. We wonder where the author cultivates his assumptions. If cabbage were confined to the colorrhœic infant we might suggest a theory of homochromy. It would be a pleasant working hypothesis and as far as we know an original one. "Sweets to the sweet," hydrarg. ox. flav. for the golden staphylococcus and scarlet red for the lurid ulcer suggest themselves. Corrosive tablets, which are frequently coloured with methylene blue, we know are fatal to the bacillus pyocyaneus. We could go on like this for a long time and would evolve a method that would present features no more ridiculous than any other form of *post hoc* therapeusis. As it is we merely suggest, and present the germ of an idea to any enterprising "specialist" who cares to make use of it.

The Ammoniacal Diaper.

One of the small points which make for comfort in an infant is the cleanliness or otherwise of its diapers. The occurrence of an ammoniacal odour thereupon is seldom, if ever, reported to the medical attendant, being thought too trivial for his notice. Attention has been recently called to the subject by Dr. Thomas S. Southworth, of New York, (*a*) who has examined a number of infants whose diapers presented this odour. The urine of healthy infants does not contain ammonia in sufficient quantities to attract notice, for, as a rule, nearly all the ammonia is excreted as urea, but if there exist in the body an excess of unoxidised acids for whose neutralisation the supply of fixed alkalies does not suffice, the ammonia may take the place of these latter and form ammonia salts of the acids which are excreted in the urine. An increased production of acids occurs as a result of faulty metabolism, chiefly when too much fat is given in the dietary. It is found that the administration of alkalies, such as potassium citrate, and a reduction of the amount of fat in the milk or mixture will be sufficient to prevent the ammoniacal odour appearing in the urine. It is not a question of decomposition of the urine at all, but rather one of metabolism, for the ammonia is excreted in a recognisable form, making its presence discernible by the sense of smell. This clinical sign, if present, is of considerable importance, therefore, as serving to indicate the degree to which the infant is digesting its food. The approximate change in the composition of the food will cause the disappearance of the ammoniacal odour.

Nocturnal Enuresis.

That enuresis is a common bane of the night nursery will be admitted by all who have much to do with the care of young children. It is generally considered that inability to retain the urine is a symptom, the cause of which must be carefully ascertained before it can be adequately treated. The subject was recently brought before the Section for the Study of Disease in Children of the Royal Society of Medicine by Dr. W. M. Robson, who thought that more attention should be given to the cases in which hypothyroidism exists, such children being generally undersized and backward, suffering from dead fingers and toes, highly arched palates, and who feel the cold a great deal, especially at night. In these cases the exhibition of thyroid extract in small doses will often act well, promising results having been obtained by Dr. Leonard Williams with half a grain of the dried thyroid twice a day. Dr. Robson believes that, excluding gross disease, such as tubercle or vesical calculus and spinal disease, enuresis is primarily a functional nervous disorder. This being so the condition must be treated vigorously, and any source of reflex irritation, such as threadworms, enlarged tonsils and adenoids, removed. The general health of the child must be carefully built up on sound lines, and the nervous instability controlled by suitable drugs. Atropine treatment, which possesses many inconveniences, is still the one to which the majority of medical practitioners lean. Whether autosuggestion will be more utilised in the future remains to be seen, for several cases benefited by this means have been reported from France.

Cardiff Admits Scotch and Irish to its Hospital Appointments.

There has been a hot dispute at Cardiff over the proposed alteration of the present Infirmary rule leaving open staff appointments to holders of membership and licentiate qualifications. A determined attempt has been made to restrict the posts to men holding the fellowship of the Royal College of Surgeons of England or the membership of the London Royal College of Physicians. Cardiff has taken a broad and progressive view of the matter, and has declined to play into the hands of privileged corporations. The question is no new one: it has been threshed out by the Irish graduates for the past twenty years and more.

(*a*) *Archives of Pediatrics*, October, 1913.

Why should the holders of Scotch and Irish qualifications be debarred from the holding of hospital appointments? Why, for that matter, should members of the English Surgeons or licentiates of the London Physicians be ousted from a similar position? The higher qualifications, as a rule, are gained by young men on mere book-learning, before their capabilities for practical scientific work could by any possibility be ascertained. Viewed judicially, the whole thing resolves itself into a cynical, cold-blooded device for retaining power in the hands of two ancient colleges. Cardiff may be congratulated on having refused to listen to the wiles of these mediæval sirens. Why should it echo the ancient warning that "no Scotch or Irish need apply"? One of the heaviest blows so far bestowed upon this absurd privilege was given a year or more ago in a northern University town. One of its chief hospital posts was advertised for competition, with the appended condition that the holding of the local University degree was an essential condition. Were all the University towns to follow this sensible example, and were Scotland, Ireland and Wales to taboo the English Colleges, it is likely that ere long this worm-eaten privilege would die out. The Colleges, of course, whatever their original attitude in the matter, have no power to alter the conditions of the appointments in question: reform in that direction must come from the governors of the voluntary medical charities.

The Institutional Treatment of Tuberculosis.

The Local Government Board has recently issued a circular letter to the councils of counties and county boroughs of England supplementary to the circular of May 13th with reference to the maintenance grant towards the cost of sanatorium schemes for the treatment of tuberculosis and giving details of the manner in which they propose, commencing with the financial year 1914-15, to distribute this grant. On the submission by the councils of estimates where expenditure is wholly in respect of the scheme of treatment approved by the board and is *prima facie* reasonable, grants will be made during the first half of the financial year up to one-half of the estimated expenditure of the council during the half-year, and in the second half-year grants up to 30 per cent. of the estimated expenditure of the council for that half-year will be paid after allowing for any excess or saving on the preceding half-year. The balance of the grant will be paid after the council's accounts for the whole financial year have been certified by the district auditor. The maintenance grant is available in respect of the institutional treatment of all cases of tuberculosis, including cases of destitute persons who would otherwise be treated by the guardians, and the Board say it is therefore desirable that in the course of time the scheme for the institutional treatment of tuberculosis established by the county and county borough councils should be developed so as to make provision for all classes of the community, including Poor-Law cases. Particulars are given of the details required to be furnished to the Board respecting any proposed tuberculosis dispensary it is desired to establish. Hospital beds are also required for the treatment, and observation of special cases as distinguished from sanatorium beds. The Board add that the concentration in the hands of one authority of the institutional treatment of tuberculosis in any area should lead to increased efficiency and should ultimately result in some economy.

PERSONAL.

H.M. the King has granted to the following officers authority to accept and wear decorations, as stated, conferred upon them by the Khedive of Egypt, authorised by the Sultan of Turkey:—Fourth Class, Imperial Ottoman Order of the Osmanieh.—Major J. Powell, M.B., R.A.M.C. Fourth Class, Imperial Ottoman Order of the Medjidieh.—Captain R. J. C. Thompson, R.A.M.C.

Dr. E. L'Estrange Ledwich has been appointed Consulting Physician to Mercer's Hospital, Dublin.

Sir John Tweedy, F.R.C.S., has been appointed a Civilian Member of the Naval Medical Consultative Board.

We are glad to learn that Sir Donald MacAlister is reported to be out of danger, and it is hoped that he will now make a rapid recovery.

Dr. F. C. Purser, F.R.C.P.I., has been appointed Visiting Physician to Mercer's Hospital, Dublin, in place of Dr. E. L'Estrange Ledwich, resigned.

Professor Ernest Henry Starling, F.R.S., M.D., has been awarded a Royal Medal by the Royal Society for his contributions to the advancement of physiology.

Dr. Robert Hughes, of Stoke-on-Trent, has been elected Chairman of the newly-constituted School Medical Service group of the Society of Medical Officers of Health.

Mr. John C. Bridge, F.R.C.S.Ed., D.P.H.Cantab., Medical Officer of Health for the County of Brecon, has been appointed by the Home Secretary to be a Medical Inspector of Factories.

Sir William S. Church. Bart., M.D., has been elected a Trustee of the Hunterian Museum of the Royal College of Surgeons of England in place of the late Sir Jonathan Hutchinson.

Dr. Valentine Stone, of Montrose, was presented the other day with his portrait in oils, painted by Mr. Fiddes Watts, A.R.S.A., as a token of his services to the community and of the respect and esteem in which he is held in the district.

At the first meeting of the season of the Royal Geographical Society last week, the Society's special Antarctic medal was presented to Surgeon L. Atkinson, R.N., and Surgeon Levick, the surviving medical members of the British Antarctic Expedition, 1910-13.

Dr. Thomas Evans, Medical Officer of Health and School Medical Officer, Swansea, will open a discussion on "Open-Air Education and Sanitation" at the provincial sessional meeting of the Royal Sanitary Institute, to be held at Swansea on November 21st, at 6.30 p.m.

Dr. H. Bayon, Research Bacteriologist to the Government of the Union of South Africa, will deliver a lantern lecture at the Royal Society of Medicine, Wimpole Street, W., on Thursday, November 20th, at 5 p.m., on "The Leprosy Problem in the British Empire, illustrating the Clinical and Bacteriological Aspects of the Disease."

With a view of perpetuating the memory of the late Dr Trevelyan, it has been proposed to place in the General Infirmary, Leeds, a tablet and portrait in bronze relief. The chief part of the cost of the memorial has already been subscribed by his colleagues on the Board and Medical Staff of the Infirmary.

CLINICAL LECTURE
ON
SOME COMMON DISORDERS OF NUTRITION IN INFANCY. (*a*)

By ERIC PRITCHARD, M.A., M.D., M.R.C.P.Lond.,

Physician to the Queen's Hospital for Children, Physician to Out-Patients, City of London Hospital for Diseases of the Chest, Victoria Park; Hon. Physician for Infant Consultation, St. Marylebone General Dispensary, etc.

Before I refer in detail to one or two of the common diseases of nutrition which have been dignified by names, I would like to draw your attention to a few points in the physiology of nutrition itself.

When we speak of the state of nutrition of an animal or of a human being, I imagine that few of us conjure up a very clear picture of the exact meaning of the term we employ. We are apt, for instance, to regard the popular expression "to be well nourished" as synonymous with "being in a condition of good nutrition." As a matter of fact, "to be well nourished," in its more usual acceptation, is to be fat and sleek —to be in the sort of condition in which prize cattle and babies are when they are sent to shows, a very different thing from being in a sound condition of health. I should find myself in a very difficult position if I were asked to define shortly what I myself understand by the term good nutrition. It certainly has very little to do with reserve stores of fat or glycogen. and it certainly has a great deal to do with the functional efficiency or "fitness" of the individual.

When an organism as a whole is said to be in a condition of good functional efficiency or good nutrition, such a statement implies that the individual organs or elements that make up the sum total of its anatomy are also in a condition of functional efficiency. We ought therefore to judge the condition of nutrition by the standard of its functional efficiency rather than by that of outward appearances. There is truth in the statements that a good horse is never a bad colour, and that no one can judge of the time-keeping qualities of a watch by merely inspecting the mechanism, and for the same reason there is truth in the statement that there are few people who can judge of the physiological efficiency of the human organism by a simple examination of its exterior characteristics. There are, however, a large number of physiological functions which betray their merits or defects by visible and objective manifestations. For instance, if the liver does not play its part efficiently in the destruction or combustion of the products of intestinal putrefaction, the individual will be unduly pigmented, or muddy of complexion, or, again, if the kidneys are diseased or incompetent the tissues may be œdematous or the complexion bloated. It requires, however, a very shrewd observer to judge at all accurately of the condition of nutrition of any particular individual by an examination of externals. He must judge by performance and not by appearances.

In order that any organ or tissue may be in a condition of good nutrition, or good functional efficiency, certain conditions are essential. In the first place for good nutrition the organs or tissues themselves must possess normal qualities, qualities which will enable them to perform the duties required of them. Secondly, they must be provided with the food or nutritive material which are required for its metabolic processes. And thirdly, they must be in connection with a normally constituted nervous arc.

The soundness and integrity of this nervous arc is of paramount importance for the nutrition of the highly complex organs of which our bodies are composed.

Let me take, for instance, such an example as the biceps muscle. For this muscle to be in a condition of functional efficiency it must constantly exercise its function or it will assuredly atrophy. The functions of this muscle are not only exercised when it becomes mechanically shortened and it performs external work, but its activities are in constant operation in the mere maintenance of "tone." Tone, however, ceases to exist the moment the integrity of the reflex arc is damaged or destroyed. A never failing stream of sensory or centripetal impulses constantly impinges on the nerve cell which controls the administrative functions of the reflex arc. These centripetal impulses are interpreted by the nerve cell and transmitted to the muscle in the form of an endless succession of trophic or tone-giving stimuli. The moment these centripetal impulses are cut off, as by severance of sensory nerves, or the moment the functions of the nerve cell are dislocated, that moment does the muscle cell lose its tone, or, in other words, fail in nutrition.

Whether, therefore, we take the case of a single muscle, or of the body as an aggregate of many organs, we can see, in the light of these fundamental conceptions that nutrition depends on a large number of factors, chief and foremost among which is the integrity or efficiency of the nervous arc.

Now bearing these facts in mind I would ask you to turn your attention for a moment to a consideration of the first of the factors which I have already enumerated as requisite for nutrition: namely, the food or nutritive supply. In order that nutrition may be maintained, certain food requirements must be observed. The food must contain all the elements required by the various organs for the performance of their functions, and in adequate amounts. If the supply falls short or is excessive in amount, the organism suffers. But, owing to the vast reserve powers of the body, there must be a large excess or a serious shortage to produce any material damage.

I think there can be little doubt that the infant who is breast fed often suffers from a deficiency of iron. At the best of times, human milk is most inadequately supplied with this base, and if, as often happens, the mother is anæmic from loss of blood or from constitutional

---

(*a*) Lecture given to Post-graduates at the Queen's Hospital for Children, April 28th, 1913.

causes, the milk may be conspicuously impoverished in this respect. Under such conditions the infant exhibits a number of symptoms of malnutrition associated with its anæmic condition. One of the most striking examples of malnutrition due to deficiency of one of the essential elements in the infant's dietary is that which is due to the condition known as scurvy. It has long been known that infants fed exclusively on dead or stale foods are apt to develop certain hæmorrhagic symptoms, but the actual cause of the characteristic manifestations of the disease has only recently been discovered. It is now known to be due to deprivation of certain chemical substances called *vitamines*, which exist in most fresh vegetables or animal juices, but are highly perishable when exposed to high temperatures, or if kept for any length of time. The exact chemical constitution of these bodies has not been made out, but they are known to be somewhat complex derivatives of nucleic acid. They have been found in and can be separated from most vegetable juices. Another instance of malnutrition due to the deprivation of an essential element is the condition of osteoporosis, which develops when the organism is deprived of its due requirements of calcium salts. This condition, though bearing certain outward similarities to rachitis, is of an entirely different pathogenesis. I could mention many other pathological conditions which are due to default in the supply, but they are of comparative rarity as contrasted with the pathological conditions due to excess. The organism has many defences against excess, whether with respect to one, many, or all of the elements in a dietary. The organism can defend itself against indiscretion of this kind by vomiting, diarrhœa, storage, combustion, or excretion, but each of these prophylactic measures entails some pathological penalty which can be recognised as a special symptom of malnutrition.

In my opinion the commonest cause of malnutrition in infants is decomposition of excess of food in the bowel, against the consequences of which diarrhœa and vomiting are rational protective reactions.

If food greatly in excess of the powers of digestion or in excess of the nutritional requirements be taken into the system, it will undergo abnormal putrefactive or fermentative processes in the bowel, with the consequent formation of abnormal and toxic products. These poisonous results of disintegration are absorbed into the portal circulation and carried to the hepatic crematorium, where, under favourable and normal conditions, they are submitted to destructive combustion. But the strain thus imposed on the liver is very apt to cause a breakdown of function, and when this occurs, these poisonous bodies escape into the general circulation, and work their fell purpose on those structures which are most susceptible to their toxic influence. The most sensitive tissues are naturally those of the nervous system. And hence in conditions of so-called intestinal toxæmia we almost invariably find extensive evidence of disturbance of nervous function. Either increased excitability with over-action, or reactionary depression with loss of function.

With excess of nitrogenous or protein foods the decomposition products are albumoses and toxins. It is these in particular which lead to the results above described. With excess of carbohydrates, we find the acid products of fermentation, lactic, acetic, propionic, succinic, and other acids, which are absorbed into the bloodstream and secure neutralisation at the expense of the circulating or fixed bases of the body. A great demand is consequently created for calcium, sodium, potassium, ammonium etc., and the tissues are thus deprived of a considerable proportion of the mineral bases they so urgently require.

With an active fermentation of carbohydrates proceeding in the bowel, the organism is in a condition of potential acidosis, that is to say, the blood would actually become acid, and extremely acid, were it not for the neutralising influence of the metallic bases. The neutral salts thus formed are excreted from the blood as rapidly as possible, but not necessarily in the urine by the renal route. They are excreted by the activity of the mucous membranes and largely found in the fæces. Under all conditions, and especially in conditions of rickets, the amount of calcium found in the fæces is extraordinarily high; as much as 25 per cent. of the dried residue of an infant's motion is often found to consist of the lime base.

The withdrawal of calcium from the system has serious consequences, quite apart from the decalcification of bone, which is one of the concomitants of mulnutrition of this kind. Calcium salts are urgently required for all growing tissues, especially nervous and muscular tissues. Consequently we can well understand that, when the system is deprived of lime, nervous symptoms and muscular debility are liable to supervene. Thus from the decomposition of excess of proteins in the bowels, we can trace a series of symptoms which are mainly referable to the toxic effects of the products of abnormal proteolysis acting on the nervous system. And from the effects of carbohydrate fermentation we find another group of symptoms, mainly those due to an acidosis and to the withdrawal of calcium and other bases from the system. In cases of injudicious feeding we sometimes find both groups in combination, and sometimes operating alternately.

The symptoms that I have described are the usual manifestations which are found in cases of rickets, and I feel convinced that the pathogenesis of this illusive disease is very closely concerned with the toxic effects of the products of decomposition and fermentation. Decomposition and fermentation may occur in the bowel from a number of different causes, chief among which are disturbances of digestion due to inappropriate or irregular feeding, and to actual or relative excess of food. If food is supplied in quantity greater than required for the physiological functions of the body it is at first stored up in the body in the form of reserve of fat or glycogen, and when the limit of storage is reached it is, as far as possible, rejected at the seat of absorption, and hence is exposed to the attacks of the intestinal flora. Exactly what constitutes excess of food and what constitutes a deficiency is a very complicated question. An active infant performing daily many muscular exercises, living in a comparatively cold environment, and not clothed too warmly, has physiological requiretments for food which are not present in an infanwhich is wrapped up in many petticoats, in which muscular movements are impeded, and which is seldom taken out of doors. Without labouring this point too much I would point out that Dr. P. Lavialle (*a*) in an exceedingly interesting series of calorimetric experiments has proved that the wearing of an ordinary bonnet effects an economy of 50 calories in the 24 hours, that is to say, an infant wearing such a protective covering to the head requires 2 ozs. of milk less than does the infant without one. Again, an infant wearing stockings effects an economy of 150 calories, or the equivalent of 5 ozs. of milk, and the infant with a shawl loses less heat by 100 calories than the one without, and consequently requires 4 ozs. less milk. Examples of this kind could be multiplied *ad infinitum*, and they suggest a number of speculations on the different requirements for food of infants differently situated. For instance, if an infant, lightly clothed, given a bath every day, taken out in the open air for many hours each day, given full opportunity for muscular exercise, stimulated by the vitalising influence of light and sunshine, requires 20 ozs. of milk in the 24 hours, how many ounces of milk should be given to an infant of similar age and weight which is wrapped in innumerable thicknesses of clothing, kept in dark, stuffy rooms, seldom taken out of doors, seldom given a bath, and hampered and impeded in all its muscular movements?

I have long pointed out that over-feeding, or rather relative over-feeding, is responsible for most of the troubles of infancy, and that it is the main ætiological factor in the production of rickets; and that a reduction in the quantity of food supplied, combined with the creation of a greater physiological demand by the stimulating influence of the graduated cold bath, and by the display of muscular activity combined with lighter clothing are the essential elements in the cure.

I have pointed out that the integrity of the reflex arc is absolutely essential for the maintenance of nutrition. I would now call your attention to the predominating influence exercised by the condition of excitability of the trophic or administrative element in this arc: namely, the nerve cell.

If the nerve cell is in a condition of normal excitability it will transfer in a perfectly normal manner to the centrifugal, trophic or motor nerves the centripetal stimuli which reach it, but if the nerve cell is in a condition of raised excitability it will magnify or exaggerate the resultant effect. On the other hand, if the cell is in a condition of lowered excitability the reverse consequences will follow.

We now know that there are constantly present in the blood a great number of internal secretions, sometimes called hormones or activators, which are capable of exercising a most remarkable selective influence on different groups of nerve cells, raising, or otherwise influencing their respective degrees of excitability. Instances of this kind at once occur to one—the internal secretion of the thyroid raises the excitability of most nerve cells, and immediately leads to a general quickening of the metabolic processes, raising the temperature, increasing the frequency of the pulse and reducing the latent period of nervous reflexes. The internal secretions of the pituitary body, the pineal gland, the adrenals and the parathyroids have still more remarkable selective affinities for various groups of nerve cells, influencing the growth and development of the body, delaying or quickening sexual development, modifying blood tension and influencing the tone of both voluntary and involuntary muscles. The influence of the internal secretion of the so-called ductless glands must now be regarded as one of the most important factors with which we have to reckon in the physiology of nutrition.

It is quite impossible for me on this occasion to enter into the details of diagnosis whereby the pathological influences of defects in these internal secretions can be recognised. All that I have been able to do is to point out that nutrition as a whole depends on a great number of different factors which are concerned with the food supply, the reception of centripetal impressions and their reflexion into centrifugal channels by the administrative intervention of the nerve cell, and that the functional capacity of the nerve cell so to transfer these impressions depends very largely on the activating influences of circulating hormones, autogenous poisons, or even foreign substances introduced from without.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal, The lecture for next week will be by Sir George H. Savage, M.D., F.R.C.P.Lond., Consulting Physician to and Lecturer on Mental Diseases, Guy's Hospital, London; Consulting Physician to Earlswood Asylum. Subject: "Post-Influenzal Neuroses and Psychoses."*

ORIGINAL PAPERS.

THE PREVENTION OF MALARIA. (*a*)

By MALCOLM WATSON, M.D.Glas.,
D.P.H. Camb.,
Chief Medical Office of the Federated Malay States Hospitals.

The author said that the miasmic and telluric theories of malaria had paralysed all efforts to eradicate the disease. It was Ross's discovery of the mosquito carrier which had pointed the way to the prevention of malaria. Successful anti-malarial work was first carried out in Klang, Federated Malay States. On arrival there as a Government surgeon, in January, 1901, the lecturer found the town full of malaria, mosquitoes and swamps, and advised Government to attempt to control the disease by a drainage scheme. This was done, and malaria at once practically disappeared. No European had contracted the disease in the town since 1901, and of 455 children examined in 1909 only 13 had enlarged spleens, all of whom gave a history of having suffered from malaria before they came to the town. In the same year a new port for the State was opened—Port Swetenham. Within 2½ months of the opening, work was practically at a standstill from malaria. The Customs, Harbour, and Railway staffs were in hospital, and the closure of the port was imminent, when the pushing forward of a drainage scheme so improved matters that in a short time the business of the port was going again with comparatively little trouble. As the land was below spring-tide level, embankments had to be thrown up round it, and the drains were closed by auto-

---

(*a*) Report. Congres National des Gouttes de Lait tenu Fecamp, 1912.

(*a*) Lecture delivered before the Glasgow Medico-Chururgical Society, November 7th, 1913. Specially reported for this journal.

matic valves to prevent the entrance of the sea. The net result of the drainage of these two places was to reduce the deaths by some 400 per annum.

In the same year Ross and Logan Taylor engaged in successful preventive work at Freetown, and in 1902 Ross inaugurated measures in Ismailia which brought about the disappearance of the disease there. In 1903 the publication of the lecturer's observations on malaria in rural districts led the Government to undertake the Kapar drainage scheme, embracing some 24,000 acres. There, by means of drainage and cultivation, control was obtained over malaria on the low coastal land, which was supposed to be the very stronghold of the disease on account of its stiff clay soil and high ground water. It was found that the amount of malaria bore a definite relation to the distance the population was from the breeding place of the particular mosquito which carried the disease; that the death-rate of the population was related to the amount of malaria as expressed in the spleen rate of the children; that the breeding place of the particular mosquito, *Anopheles umbrosus*, was a jungle pool; and that to abolish malaria it was only necessary to drain the pool and fell the jungle, or to remove the population away from the jungle and its pool.

While these measures were completely successful on the low coastal lands, malaria of the most malignant kind persisted among the hills, in spite of good houses on dry elevated sites, with pure water supplies and excellent sanitation. Having found that this was due to the presence of the *Anopheles maculatus*, which bred only in hill streams, the lecturer adopted the measure of carrying the streams underground in pipes for a certain distance, about half a mile, round dwellings on hill land. This was done with complete success where the full distance was piped, and marked improvement where a more restricted area only was drained. On the same lines the Government subsequently carried out an extensive subsoil drainage scheme in the Federal capital, and in 1912 the principal medical officer reported: "The results were immediate and completely satisfied the most sanguine anticipation. It may safely be claimed that general malarial infection is now non-existent within the drained area. The ravines drained have withstood satisfactory storms of great violence, and no instance of a pipe drain being washed out has occurred."

In the course of his work the lecturer found that certain rice fields or paddi swamps were free from malaria, or practically so, while others were intensely malarious, and showed that the difference was due to a difference in the species of mosquito present. It was of first-class importance to know that rice could be grown without producing malaria, and from this fact further discoveries of value were to be anticipated. There was most prospect of advance in the biochemistry of the swamp and its bearing on the larval life of the insect.

Enquiry as to how far conditions similar to those in the Federated Malay States prevailed in other parts of the world revealed the following facts. In Italy, malaria was found only in swampy places in the plains, and not at all in the hills, because there was no mosquito which could maintain its existence in hill streams. In India the conditions strongly resembled those in Malaya, and a similar explanation was now accepted. In Hong Kong the lecturer had identified a mosquito which bred in the hill streams as the same as the stream breeder in the Federated Malay States, though known locally by a different name. Malaria had always been severe in Hong Kong, and was partially overcome by "training the nullahs"—*i.e.*, by building drains with granite slabs, so that the water had a clear run down the steep hill sides. In Sumatra, across the Straits of Malacca, there was no stream-breeding mosquito, and so no hill malaria. The disease prevailed only along the coast where the swamps had not been drained. In the collection of Philippine mosquitoes in Washington the Malayan stream-breeding mosquito was not found. As regards Japan, the conditions were even more favourable than in Europe, since the only anopheles mosquito found bred in rice swamps, and carried only the two benign forms of malaria, not the subtertian malignant or æstivo-autumnal parasite found in Southern Europe.

During a recent visit to Panama the lecturer visited most of the stations of the American Sanitary Department, and studied the habits of the two chief malaria-carrying anopheles, the *A. albimanus* and *A. argyrotarsis*. Carrying on the works in what is practically jungle, with a minimum of agriculture, the Americans have overcome malaria mainly by oiling the places where the mosquitoes live. They strongly advocate drainage, but the engineering works constantly interfere with the drains. Mosquito-proof houses are used by the Americans and by some of the Spaniards, but the majority of the inhabitants are not protected. Quinine is practically not used as a prophylactic. The system of oiling, however, is perfect, the whole area for about half a mile round all dwelling places being oiled once a week so thoroughly that every mosquito is killed. The total area treated is 53 square miles. Thus in jungle, in the worst possible conditions, the Americans have built up and maintained a labour force of over fifty thousand men, whose death-rate compares favourably with that of any corresponding population even in temperate zones.

In British Guiana the inhabited portion of the country is a fringe along the coast and up the rivers, much of it having been reclaimed from the sea. Drainage, with the drain outlets protected by tide gates, and agriculture have brought about the disappearance of both *Anopheles albimanus* and *A. argyrotarsis*, and produced a fall in the incidence of malaria equal to that in Panama. Populations even live in health on the edge of rice swamps, the mosquitoes being eliminated by a proper control of the irrigation.

Barbadoes is unique among the West Indian Islands in being non-malarious, and its freedom has been attributed to the presence of the small minnows called "millions," which are supposed to eat the mosquito larvæ. The lecturer, having visted the island, believed the real explanation to be that the island is composed of a coral chalk, and is so pervious to water that no surface pools exist, and consequently there are no mosquitoes.

THE PLACE OF THE OPEN-AIR SCHOOL IN PREVENTIVE MEDICINE. (a)

By SIR GEORGE NEWMAN, M.D.,

Chief Medical Officer and Principal Assistant Secretary, Board of Education.

Sir George Newman said that at first sight there did not appear to be very much to say about open-air schools, except, perhaps, to encourage the audience to go and live in one of them, but although this was not an abstruse subject, it was one of growing importance. If they would stem the tide of physical and mental defect in the childhood of this nation, he had no doubt it would be along the lines of what he had called the open-air school process. He looked upon the open-air school not as a school held in the open air, but as a method, a process, a treatment of all education. The necessity of educating the body before attempting to educate the mind was recognised by the ancients. Plato and Aristotle referred to the value of gymnastics in the open air, not with the object of producing acrobats, but for the scientific training of the human body. The open-air ideal was characteristic of the best days of Greece and Rome. It fell into abeyance until the Renaisance period, from the middle of the seventeenth century to our own time. Sir George quoted the sayings of John Locke and Rousseau and Pestalozzi as advocating body culture before the education of the mind, and they urged that it should be carried out in the open air, and be for the normal child.

(a) Chadwick Lecture, University of London, November 11th, 1913, Sir Alfred Pearce Gould, Dean of Faculty of Medicine, in the chair.

The modern period differed from that period, in that there had been a renaisance of the idea of educating the abnormal child in the open air. That was due to different factors. (1) The growth of urbanisation of the towns, which had necessitated a different method of education. In 1870 there was a movement, which had been considerably developed in America, to get the child into the open air, and parks and open spaces were provided for children to play in. (2) The Children's Country Holiday movement began in 1878 in this country. (3) Mrs. Humphry Ward began the system of vacation schools in connection with the Passmore Edwards settlement. All these movements had helped forward the open air school movement, and no doubt some contribution had been made by the general dissatisfaction they all felt with the conditions under which many children were compelled to be educated in the schools in the large towns. Some of those schools were not ideal. Another factor which had helped the movement was the efforts to prevent tuberculosis, which had impressed the public mind with the remedial effect of the open-air treatment for consumption.

What were the evidences of a sick child, and what could they do to prevent the causes of that sickness? The first important fact was that a great mass of children died under five years of age, and the period of school life was one in which very few children died. The same applied from 15 to 55, and from that time there was, of course, a very large increase. There were four great causes of death before old age, namely tuberculosis, diarrhœa, pneumonia and heart disease, but the seeds of those diseases were sown in childhood, and were known under the names of measles, whooping cough, diphtheria, malnutrition and tuberculosis. If they were to lower the death rate from those diseases, they must turn away from the external environment of the sewerage, water supply, and housing, and deal with the personal condition of the children under school age and up to 15. Measles was responsible for the deaths of 47,000 children in one year. First they got measles, then tubercle, and then a cripple. It was no use trying to prevent disease when it was matured. They must attack it when they could grapple with it, and it must be remembered that disease in a child responded more readily to treatment than in an older person. A large proportion of these deaths from measles was preventable, or at any rate, remediable. At least 70 per cent. of those deaths ought not to have taken place. There was a great deal that the open air process could not do. It could not deal with the children under school age, but it could deal with the children of school age in five ways, namely: (1) By nipping the disease in the bud at its earliest and most incipient stage; (2) by preventing the after effects of disease which in many cases caused death or disablement; (3) by supplying the opportunity of repair; (4) by nurturing the debilitated and backward child; (5) by furnishing a new way of life for these children.

Sir George remarked that we had a large number of defective physiques in our schools, and this was, in brief, his case for the open air school process. In his succeeding two lectures on the two following Tuesdays he would show them schools which were doing effective work on the lines he had indicated.

Subsequently a number of pictures were shown by means of the lantern slides depicting the life at open air schools at Birmingham, Sheffield, Halifax, and Charlottenburg in Germany. Speaking of the open air school at Uffculme, which had been presented to the city of Birmingham by Mr. Barrow Cadbury, Sir George Newman said that the school had been constructed at considerable cost and the very best methods were being applied for the benefit of the children. There was no doubt that it was one of the best open-air schools in the whole country.

ON INDICATIONS FOR INDUCING PREMATURE LABOUR IN CASES OF EXCESSIVE VOMITING AND HEART DISEASE. (a)

By PROF. DR. ODON TUSZKAI, of Budapest.

I discussed both hyperemesis and cardiac trouble many years ago from different standpoints, and with your kind permission I will briefly now throw what light I can on the side of the question with which this Congress is concerned, and give some account of my own obervations, which are of a sufficiently interesting nature. In the first place, there can, I suppose, be no difference of opinion on the importance of conservatism among modern gynæcologists, whose most eminent representatives I have the honour to address, for we know that prescribing now one remedy and now another may minimise or even annihilate the modern boon of asepsis. In endeavouring to avoid the use of the knife by bringing our whole knowledge, experience, and mature ethical sense to bear, we must not, however, deprive sufferers of the great advantages of surgery, but must come to a definite diagnosis.

No disorders in pregnancy are more difficult to handle than excessive vomiting and heart disease, and an obstetrician is never in a more difficult position than when dealing with such cases. Some modern views on this subject only tend to perplex us. If we assume, for instance, as Hegar does, that excessive vomiting is only a symptom of hysteria, we should never be justified in interrupting pregnancy, for hysteria is a functional disease of the whole nervous system which no operation can cure. It would appear from this hypothesis that every case of hyperemesis—or at least most of them—could be cured by feigned operations, for in the cure of hysteria suggestive therapeutics play a leading *rôle*. It cannot be denied that hysteria does account for some cases of hyperemesis, and such hyperemesis hysteria can be cured or at least improved by suggestion, as for instance, by prescribing medicines with a strong smell or a pungent taste: or by imaginative treatment, such as cauterisation of the portio vaginalis, change of climate and health resort or institution; but these cases are purely hysterical and cannot be referred to the pregnancy at all, or they would not have been amenable to the treatment mentioned.

(a) Paper read before the Section of Obstetrics and Gynæcology, International Congress of Medicine, London, August, 1913.

Again, if excessive vomiting during pregnancy is only a secondary symptom of some complication of pregnancy, such as meningitis, gastric diseases, neurasthenia, peritonitis, etc., the vomiting will subside as soon as the causal complication is removed. These are cases of excessive vomiting during pregnancy, but not caused by pregnancy, and are not cases of pernicious vomiting. Finally, if we ascribe hyperemesis to intestinal toxic symptoms, though the explanation of such a condition is not quite clear, it must be explained as a disorder of metabolism which is independent of pregnancy. As hyperemesis may frequently originate in other causes than in the anatomical, physiological, or pathological conditions of pregnancy, it is clear that in such cases it would be futile to interrupt pregnancy for this condition.

Not only would it be justifiable to try every variety of treatment in these cases, but such treatment should be compulsory, because by its aid we can diagnose each individual case. Cases amenable to these therapeutic agents may be classified as cases of excessive vomiting, but not as cases of pernicious vomiting of pregnancy. From this it is evident that there is a peculiar form of vomiting due to pregnancy which can never or only very rarely be stopped as long as pregnancy continues. In my earlier writings on this subject I tried to show that the cause of this special disease was attributable to irritation of the perimetrium, through the perimetrium becoming anæmic from the pressure of the gravid uterus upon the peritoneum, either disease or other cause having lessened its power of dilating. Peritoneal irritation as the primary cause of vomiting is a recognised fact, but more physiological investigation will be required to show the causal connection beween the two. Though, as I have already said, conservative treatment would forbid surgical interference unless absolutely necessary, yet if a severe form of pernicious vomiting of pregnancy is diagnosed, pregnancy should be interrupted. What are the clinical symptoms of hyperemesis gravidarum?

1. In the first place, by the diagnostic and therapeutic measures already described every other possible cause, such as hysteric stigmata, must be excluded.

2. The diagnosis of pregnancy as a cause by local symptoms consequent on slight perimetritis, such as:

Local tenderness with increased frequency and severity of vomiting after bimanual examination: especially in cases in which the power of dilatation of the peritoneum has been lessened by a previous perimetritis. In view of such symptoms the trouble may reasonably be referred to pregnancy, but interruption of the pregnancy would not be justified until:

A. Hot or cold local applications or applications *per vaginam* have failed to bring about any improvement. This method of treatment aims at improving the blood-supply of the peritoneum and the anæmia which causes peritoneal irritation.

B. Or until wasting has gone on for a considerable time. Experience has taught me that symptoms of such a condition would be:

1. Rapid loss of weight, of the amount of urine evacuated per day, and decrease in its chlorides with a rapid decrease in the number of red blood corpuscles.

2. Increase in the specific gravity of the urine, of alkali in the blood, and increase in the pulse-rate.

3. Appearance of albumin and renal elements in the urine (kidney of pregnancy), nucleated red corpuscles and uninuclear giant corpuscles in the blood.

If in such a condition an increased dose of opium (10-15 centigrams daily) does not diminish the secretions, then premature labour should be induced without delay. By this procedure, while keeping the desirability of conservative treatment well in view, I do not hesitate, as a last resort, to interrupt pregnancy. The question of pregnancy complicated by heart disease is beset with even greater difficulty. Three or four typical cases have come under my observation, and have led to some interesting conclusions, and though I am well aware that the number of cases observed hardly justifies such important deductions, I am of opinion that these cases warrant my suggesting new ideas and obervations. "Et si licet minima componere magnis." A single skull on the strand of the Lido was enough to suggest to Goethe the interesting theory of vertebral development. A single apple falling from a tree enabled Newton to arrive at the laws of gravitation—the principles underlying modern physic. Galileo, too, only required to see a single pendulum in the Tower of Pisa to arrive at the laws of pendulum motion, and with it the motion of the earth round the sun. "Eppur si muove."

As is well known, the pulse-rate and rhythm vary when the body is in different positions, *i.e.*, it is more frequent when a patient is standing than lying down. A long time ago Graves noticed that this variation disappeared in cases of hypertrophy of the heart, and Jorissen confirmed the observation in pregnant women. Jorissen says this hypertrophy of the heart occurs in the initial stage of pregnancy, so that the disappearance of the variation in the pulse-rate may therefore be regarded as a symptom of the commencement of pregnancy. My observations go even further. In several cases of pregnant women suffering from heart disease I was able to confirm that when want of compensation began, the variation in the pulse which had previously disappeared owing to cardiac hypertrophy, reappeared again as a sign of subsequent dilatation (or as a result of dilatation). This interesting, and so far as my experience goes, new observation was of very great assistance in determining the onset of want of compensation in pregnant women suffering from heart trouble. Most authors are of opinion that it is of the utmost importance to recognise the condition at this stage, as experience shows that want of compensation usually is a serious matter in pregnancy, and accounts for many cases of sudden death during pregnancy or after delivery. Many cases complicated by disorders of the heart, even when accompanied by the gravest symptoms, go through labour without trouble, so that it was necessary to make some kind of classification of cases based on the observations of others as well as on my own, in order to provide material for investigation.

In arranging the cases in groups my pulse-symptom was of very great value: bearing in mind in each case whether the heart disease of the pregnant woman:

1. Existed before pregnancy, or

2. Whether it appeared during pregnancy, *i.e.*, as angiosclerosis or secondary phenomenon of grave latent diseases, or

3. Whether it has been caused by the pregnancy. This third is purely a hypothesis, but not an unfounded one.

Diagnosis of the first group presents no difficulty, for we usually come across advanced disease of the heart in the early stage of pregnancy, or hear of it in the past history. Prognosis is usually rather unfavourable, as pregnancy may be prejudicial to the diseased heart. Observation of the pulse-symptom I have indicated shows that normal instability disappears for a short time (the first weeks) very soon to reappear in an increased degree. Every evidence of want of compensation usually develops with this symptom sooner or later. Diagnosis of the second group does not present any difficulty provided the previous history is carefully investigated and the patient thoroughly examined. In this group the action of the pulse-symptom is as follows:—The normal instability which has disappeared owing to the normal hypertrophy of heart of pregnancy only gradually returns, usually in the second half of pregnancy, when the latent heart disease makes its ill-effects more apparent by increase in the plethora of pregnancy. An early reappearance of the instability is a most unfavourable symptom, because it indicates the outbreak of latent disease, epecially the onset of cardiac dilatation, and prognosis is unfavourable on account of the length of time the pregnancy has still to run. If the first two groups can be excluded in favour of the third and the heart trouble be attributed to pregnancy, the diagnosis is easy, and we usually find that the pulse symptom is not noticed until the later months of pregnancy and then only very slightly.

When should labour be induced, and how far does the pulse-symptom mentioned assist in forming a diagnosis? I am of opinion that, generally speaking, heart disease will rarely indicate the induction of labour, for experience shows that most of such complications do not prejudice delivery, but three important points must not be forgotten—*i.e.*:

(1) That pregnancy may be very prejudicial to a woman who already has a cardiac affection, and may indeed be the exciting cause of an early and frequently very severe complication, which may never disappear again.

(2) That no small number of pregnant women with cardiac trouble die suddenly during pregancy, labour, or the puerperium, the heart disease being the cause of death.

(3) That if disturbances of compensation have reached a certain point the induction of labour is serious and not without risk, as pregnant women with this complication are very liable to hæmorrhage, and stagnation in the blood vessels of the pelvis may occur, due to want of compensation, and it is not possible to foresee how the operation may end, as the degree of want of compensation varies according to the individual.

It is therefore of the utmost importance to examine every patient for the pulse-symptom, in order to ascertain by this sign when cardiac dilatation is beginning, as later treatment depends entirely on this phenomenon. In patients who had heart disease before pregnancy began, induction of labour will be contemplated when the instability recurs, and be carried out if improvement does not take place, which may, however, sometimes occur. The existence of this pulse-symptom warns us to be on the alert, and indicates action before it is too late: certainly earlier than has been customary hitherto. Induction of labour will be much more rarely necessary for the outbreak of heart disease which is latent during pregnancy, still when this pulse-symptom is noticed we must do all that is possible to improve the imminent want of compensation. If the instability caused by the hypertrophy of heart has persisted long and only recurs during the last weeks of pregnancy, induction of labour will probably never be thought of.

I hope that my remarks will be of assistance to obstetricians confronted by serious complications, and that my few observations will help to elucidate some questions and induce others to undertake investigation of the subject on a wider scale.

CHRONIC INTESTINAL STASIS.

By SIR ARBUTHNOT LANE, Bart., M.S.Lond., F.R.C.S.,

Senior Surgeon to Guy's Hospital and to the Hospital for Sick Children.

The following cases were shown after the delivery by Sir Arbuthnot Lane of his lecture at the North-East London Post-Graduate College on "Chronic Intestinal Stasis, which was published in our last week's issue:—

Case 1.—Miss O. M. B., æt. 40. Came under Dr. Murray Leslie's care suffering from general debility of four years' standing, accompanied by symptoms of mucous colitis with alternating constipation and diarrhœa. Had been treated with Plombiere's douches at Harrogate and elsewhere, but with no permanent benefit. There was marked yellowish brown staining of the skin, which, in association with the asthenia, suggested the possibility of Addison's disease. There was definite pain and tenderness in the left iliac fossa over the sigmoid colon. Menstruation was irregular, and the patient complained of coldness of the extremities. She had suffered from indigestion since the age of 25. An X-ray examination was made by Dr. Jordan on March 29th, 1912. There was marked dropping of the stomach and transverse colon. The duodenum was elongated; there was considerable stasis in the colon, while the cæcum appeared to be impacted in the pelvis. Cultures of Streptococcus fæcalis and of Bacillus coli were made, and a course of vaccine treatment was given, with slight general benefit but no permanent improvement. Operation on June 12th, 1912, the ileum was short-circuited into the pelvic colon. Patient had a somewhat tedious convalescence, but is now perfectly well. There is no pain, no constipation, and the patient is able to walk many miles without fatigue.

Case 2.—Miss R. B., æt. 38. Had for some months been under Dr. R. Murray Leslie's care for chronic constipation and extreme asthenia of eight years' duration, which had gradually increased in severity. Seven years before coming under observation an appendicostomy was performed, but without permanent benefit. Her physician felt that unless her condition was improved in some way, her unhappy life could not be prolonged materially by further medical treatment. In September, 1905, the large bowel was removed to the splenic flexure. She gained in weight, being 8 st. before the operation and 9 st. 4 lb. some months later. After a time the dilatation of the stomach, which had not previously been apparent, gave trouble, and in December, 1906, the pylorus was freed from the under surface of the liver. She improved for a time, but the dilatation of the stomach was soon as bad as ever. In March, 1907, gastro-enterostomy was performed, with complete relief of the stomach symptoms. After a time the descending colon and sigmoid gave trouble, and were removed in October, 1907. The patient is now (eight years after the first operation) perfectly well. There is no constipation nor abdominal discomfort, she is able to walk long distances, and can play as many as five sets of tennis without undue fatigue, and has required no medical attendance for the last two years.

Case 3.—G. H., æt. 11 (male). Tuberculous disease of hip since the age of three. Has had two operations, and has had a discharging sinus for over a year. Six months ago a large abscess was opened, swabbed out and packed with gauze. There was, on admission, three inches of shortening and marked flexion, adduction and internal rotation. He had much constipation and well-marked toxic signs. Ileo-colostomy was performed on April 28th, 1911, and marked evidence of stasis was found in the abdomen. Improvement after the operation was rapid and continuous. The hip is completely healed, and the boy is now enjoying perfect health.

Case 4.—F. M. (single), æt. 32. Laparotomy. Constipated since 1903. Every sort of medical treatment tried. In medical wards at Guy's twice. Laparotomy. Swelling of ankles and feet. Bowels open six times in five weeks while in medical wards. Abdominal pain, but toxic symptoms not very well marked. X-rays show a delay of eleven days in the transverse colon. 1909, operation. Ileo-colostomy and colectomy. Very dense bands. Cystic right ovary. Within three months of this operation she had two further operations to free adhesions. She had severe whooping cough, and in February, 1910, developed a fæcal fistula. Operation to close fistula 1912. Now doing her work as a hospital nurse. Has no discomfort of any kind, and her friends assure her that she looks ten years younger.

Case 5.—A. E. (married), æt. 30. Constipated ever since she can remember. Has been treated at five different hospitals. Severe abdominal pain for the last 18 months. Toxic signs and pigmentation well marked. Operation, ileo-colostomy, May, 1911. Abdominal pain at the beginning of 1912. On examination, patient had a tender and full cæcum. Operation, March, 1912. Colectomy. Colon found full of hard masses. Good recovery. She now feels and looks very well. Bowels quite regular every day. Eats well. No sickness. Feels much more cheerful than she has done for years. Has gained 1 st. 2 lb. Is very impressed with the difference in her hands and feet, which are now always comfortable and warm.

Case 6.—H. C., æt. 15 (male). Severe constipation needing enemata since he can remember. General health fairly good, mild toxic symptoms. Tongue very foul. X-ray examination showed a 48-hour delay in the ileum. Large masses of fæces were felt in the cæcum and ascending colon, which were only removed after five enemata. A diagnosis of idiopathic dilatation of the colon was made. Operation, June 9th, 1911. An enormously distended colon was found, together with a marked ileal kink and masses of evolutionary adhesions. Ileo-colostomy was performed, and the patient made a rapid recovery, having enjoyed excellent health ever since. He has played football during the last two winters with no ill effects.

Case 7.—A. F. (single), æt. 34. Slight constipation for the last ten years. Severe abdominal pain for the last year. Toxic signs not very well marked, but the patient has noticed the various symptoms getting worse for the last few weeks. Operation. Ileo-colostomy. (No note of what was found.) Has been very well since the operation until about August, when she began to have some pain. A further operation has been performed, and an adherent coil of small intestine freed. Patient is now perefectly well, and has no discomfort of any kind.

Case 8.—W. C. (single), æt. 24. Constipated for many years. Severe abdominal pain. Rheumatoid arthritis of both knees, which was getting worse. Wasting of right thigh. X-rays showed extreme stasis in the large bowel. Very tender over the right rectus. Slight toxic symptoms. December, 1911: Operation. Well-marked kink of the ileum and appendix. Ileo-colostomy. General health much better. Still has some pain in the knees, but the condition, according to her, has definitely ceased to progress. Bowels open daily with paraffin. Is putting on weight, and is very much brighter and more cheerful.

Case 9.—T. I., æt. 22 (male). Constipation, flatulence and heartburn for seven years. Much mental depression. For last six months attacks of severe epigastric pain and distension. A swelling under the left costal margin appeared five months ago and has increased in size. Marked toxic signs. X-ray examination showed some delay in emptying of stomach, and a stasis of 80 hours in the colon. Operation, August 8th, 1912. A large tuberculous mass was found in the omentum, to which coils of intestine were adherent. The duodenum was dilated, and there was an ileal and duodenal kink. Ileo-colostomy was performed, and within two weeks of the operation the mass in the abdomen was no longer palpable. The patient is perfectly well and at work. No abdominal or other discomfort of any kind.

Case 10.—C. F. J., æt. 56 (male). Two years ago he began to have epigastric pain after food, which was accompanied by vomiting. These attacks occurred about twice a month. Diet proved of no avail, and the attacks became more severe. During the last six months he has been losing a good deal of flesh, amounting to 2 st. in two years. Examination showed a dilated stomach and a tender ileum. X-ray examination showed pyloric stenosis, ileal obstruction, with a delay of 36 hours, and a stasis of 96 hours in the colon. Operation, March 18th, 1912. An old duodenal ulcer causing obstruction was found, and gastro-enterostomy was performed. At the same time, there being an extremely well-marked ileal kink, ileo-colostomy was done as well. Patient made an uninterrupted convalescence, and has done his work as a commercial traveller since leaving hospital without missing a day.

Case 11.—A. P. (married), æt. 54. Six years constipated. Always had indigestion. Attacks of vomiting. Severe pain in the abdomen for the last few weeks. Very pigmented. Toxic symptoms well marked. X-rays showed duodenal distension, ileal stasis. After 80 hours, bismuth had only reached the splenic flexure. Operation, August, 1912. Duodenum distended. Marked ileal kink. Ileo-colostomy. Looks twenty years younger. Feels very well. Eats well. No pain or vomiting. Is doing her work as matron of a home.

Case 12.—K. C., æt. 44. When seven years old she had a tuberculous knee, which discharged for 11 years. From 15 to 25 she was able to do a little work, but was never strong. At 25 she went abroad owing to a breakdown in health, and she had phthisis, for which she was sent to Ventnor. She had very severe diarrhœa, and when 26 had to have her eye removed on account of an old injury. She began to have severe abdominal pain, which was diagnosed as ulcerative colitis, for which she was in bed many weeks. When 29 she had severe pain in right loin, and was given a belt for movable kidney. All this time she was passing large casts of the colon. When 37 she developed a goitre, with exophthalmos, tremor and severe palpitation, which continued for four years. Two and a half years ago she had another attack of colitis, and she was in bed four months. In June, 1912, she had another attack, necessitating a long stay in bed. On admission patient weighed 7 st., and has a very tender colon. Toxic signs well marked. X-rays show very little owing to the diarrhœa. Operation, December 16th, 1912. Marked ileal kink and extensive adhesions of colon. Ileo-colostomy. Patient has made a rapid and complete recovery and has been quite well since discharge. She is able to take all kinds of exercise and to do her work.

Case 13.—K. M., æt. 44. Severe constipation since 14. Six years ago she was said to have colitis. Has had recurrent eczema, some vomiting and nausea. Much misery. Old arthritis of right knee. Toxic signs well marked. B.P. 143 m.m. Hg. X-rays showed marked colonic stasis and considerable delay in the ileum. Operation, April 15th, 1913. Ileo-colostomy. Greatly distended duodenum and ileal kink. Blood-pressure one month later was 90 m.m. Hg. This patient is now perfectly well. Her blood-pressure now, taken when she was highly excited, was 110 m.m. Hg.

Case 14.—R. W., æt. 45. Severe attacks of constipation, abdominal pain and vomiting for last two years. Much worse for last seven months, during which time she has taken no solid food. Marked pigmentation. Much complaint of coldness of hands and feet. X-rays showed a very dilated stomach and much colonic stasis. Operation, June 6th, 1913. Stomach and duodenum extremely distended. Marked ileal kink. Gastro-enterostomy and ileo-colostomy. Uninterrupted convalescence. Patient is doing her work and is in perfect health.

Case 15.—E. A. F., æt. 42. Has always been constipated, which has been more troublesome for the last three years. Severe indigestion, flatulence and epigastric pains. Some vomiting and some melæna. Has lost a stone in weight the last six months. X-rays showed pylorospasm and marked colonic stasis (80 hours). Operation, March 11th, 1913. Dilated duodenum and an appendix controlling the ileum. Ileo-colostomy. After the operation patient had pleurisy, which somewhat delayed convalescence. She is now perfectly well and has no discomfort of any kind.

Case 16.—M. H., æt. 28. Began to suffer from pain and swelling in joints when 12 years old. Had chorea when 6 and again when 17. Arthritis spread to large joints. Went to Harrogate and had baths and massage, with no benefit. Had typhoid fever when 19. Had electrical treatment and a nine months' course of Balfour treatment. No relief. Ten months ago she was curetted, and was given a course of vaccine treatment with Staph. aureus, which was obtained from her urine. She had a course of thyroid treatment, but continued to get worse. She has had considerable abdominal pain and vomiting, and has marked toxic symptoms. Finger joints stiff and in marked ulnar adduction. Knees, elbows and shoulders affected. Has not been able to sew for 18 months. Pain in joints is lessened if no protein food is taken. X-rays show a delay in colon of over 104 hours. Operation, January 3rd, 1913. Ileo-colostomy. Marked ileal kink. There was some regurgitation into the ileum, and on May 12th, 1913, a colectomy was performed. Marked improvement in the joints followed the operation, and the patient was able to sew within three weeks of the ileo-colostomy. She is now quite free from pain and spasm and is rapidly putting on weight. Her joints have quite ceased to trouble her.

Case 17.—K. H. (single), æt. 27. Constipated since birth. Has attended several different hospitals during the last eight years. She was said to have mucous colitis, and an appendicostomy was done. She had been in the habit of taking six minims of croton oil twice a week, and says this usually opened her bowels once. She has well-marked toxic symptoms and is very pigmented. X-rays showed a five days' delay in the colon. Had been bedridden for some time. Operation. Ileo-colostomy. (No note of what was found.) Looks and feels very well. Has worked as a general servant ever since her operation. Says she is greatly benefited by the operation. She is rapidly putting on weight.

OPERATING THEATRES.

GREAT NORTHERN HOSPITAL.

TWO CASES OF RUPTURED URETHRA.—MR. ARTHUR EDMUNDS operated on a boy, æt. 11, who had been admitted with the history that he had been trying to walk on the edge of a railing in the park. He slipped and came down astride the top bar. A catheter was passed to apparently full length, but only a little blood was withdrawn. Thirty-six hours after the accident he was admitted to the hospital. He had not passed any urine, the pudenda were enormously swollen, the scrotum being the size of a baby's head, and there was œdema of the lower segment of the abdominal wall. He was anæsthetised, and three incisions were made into the abdominal wall and one on each side of the scrotum. The fluid was squeezed out as far as possible, and then a median incision was made in the perineum, which was deepened until a mass of extravasated blood was reached. This was then turned out and a bougie passed through the meatus emerging into the perineal opening. The upper vesical end of the urethra was then sought for and, after some little difficulty, discovered. The bougie was then removed and No. 8 Jaque's catheter introduced, brought out through the perineal wound, and then passed into the bladder. The urethra was then carefully sutured round the instrument. The wounds in the abdominal wall were packed lightly with gauze, a drainage tube was inserted into the scrotal wound, the perineal wound was lightly packed, and the patient sent back to bed. Four days later the abdominal wounds were sutured and healed by first intention, the swelling having completely subsided. The boy did well, although at one time there was a slight leakage from the perineal wound, but only for a few days. The catheter was removed at the end of a week, and the patient micturated normally. On one occasion he had retention for twelve hours, but this was only spasmodic; a full-sized instrument passing easily. About six weeks after the accident he again had retention, partly due to contraction, but mainly to spasm. Instruments were passed with a little difficulty, and the boy is now micturating normally.

The second case was that of a boy, æt. 5, who was admitted with a history that he had been climbing on a railing and had fallen down in a sitting position, striking his perineum on the ground. He was brought to the hospital immediately, when it was found a catheter could not be passed beyond a short distance, no urine being obtained, but a considerable amount of blood escaped. The operation was conducted as in the previous case except that, as no extravasation had taken place, it was not necessary to make any incisions into the scrotum or into the abdominal wall. Ten days after the operation the boy was doing well.

These cases, Mr. Edmunds said, show the value of an early diagnosis, but this is less important in young children where the rupture is due to an injury than in adults where it is due to the rupture of the urethra behind a stricture, inasmuch as if the urine is aseptic there is not the same risk of cellulitis, and it is often possible, as in one of the present cases, to suture the incisions.

These two cases make an interesting comparison with the case by the same surgeon published in "Operating Theatres" on August 27th.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

MEETING HELD NOVEMBER 6TH, 1913.

The President, DR. W. S. A. GRIFFITH, in the Chair.

SPECIAL DISCUSSION ON THE RELATION OF THE INTERNAL SECRETIONS TO THE FEMALE CHARACTERISTICS AND FUNCTIONS IN HEALTH AND DISEASE.

THE complete paper, introduced by W. BLAIR BELL, M.D., was distributed beforehand, and will be published in full in the *Proceedings of the Royal Society of Medicine.*

Allusion was made by the introducer of the discussion to the great advances which have been made during recent years in the science of gynæcology and obstetrics. After pointing out that from a broad standpoint femininity itself is entirely dependent on the internal secretions acting in correlation, he considered the more purely morphological and physiological aspects of the subject. The production of the female characteristics—primary and secondary—were traced to the internal secretions, and facts were quoted in support of the statements made. It was shown, too, how the internal secretions directly and through the general metabolism initiated the genital functions at puberty. By way of illustration the calcium metabolism was described in its bearing on the question under discussion.

Next, the maintenance of the female characteristics and functions were dealt with, and experimental evidence was given of the importance of all the internal secretions in effecting this end.

The conclusions in regard to the morphological and physiological aspects of the subject were:—

(1) The development and integrity of the genital organs and their functions are dependent on all the internal secretions, individually or collectively.

(2) The removal of any one organ of internal secretion produces changes in the others, and by this means we gain some insight into the existing correlations.

(3) The general metabolism is altered by extirpation of any of these organs. This alteration in the general metabolism affects the genital metabolism.

From physiological and morphological investigations we have obtained the following information which may be emplyed in the solution of clinical problems:—

(1) Our knowledge of the influence of the internal secretions on the sex characteristics and on the development of the genitalia helps us to understand the pathology of hitherto obscure conditions connected with sex characteristics and the development of the reproductive organs. So, also, can we trace the influence of the internal secretions on the psychology of our patients, for in women femininity is associated with psychical qualities which need not be defined here. These qualities are due to the combined action on the brain cells of the metabolic conditions produced by the feminine organs of internal secretion; and the normal psychical condition is frequently disturbed by pathological conditions of the endocrinous glands.

(2) Since we know something of the influence of the internal secretions on normal menstruation we can note the abnormal effects produced in regard to the menstrual function, and conversely we can observe the effects produced on the organs of internal secretion by local derangements of the genital organs.

(3) Knowing, also, the part played by the internal secretions in the metabolism of pregnancy, we can, in the same way, observe the effects of deviation from the normal.

The second part of the introductory paper dealt with pathological and therapeutical considerations.

First, derangements in the development of the genital organs and their functions were discussed under the following headings:—

(1) Imperfect and irregular primary development of the genitalia.

(2) Irregular secondary development of the female genitalia and functions.

It was shown under the first heading how pseudo-hermaphroditism might be produced, especially by hyperplasia of the suprarenal cortex. And under the second heading it was demonstrated how the onset of puberty (precocious or delayed) was under the influence of the organs of internal secretion.

Next, derangements of the fully established female characteristics and functions were discussed.

This part of the subject was dealt with at some length, since it was of considerable interest from a clinical point of view. The derangements of the fully developed sexual characteristics first came under notice. Then the derangements of the fully established functions were considered from the points of view of increased and decreased secretion from each special organ. Many clinical phenomena in connection with menstruation and pregnancy were discussed in detail.

The results of experimental investigations of the metabolism of animals after partial or complete removal of the different ductless glands were demonstrated by means of tables; and a series of photomicrographs were shown to illustrate the structural effects produced on the other organs of internal secretion after the partial or complete removal of one of the members of the endocrinous system.

Dr. Blair Bell was followed by Miss Louise McIlroy, M.D., who had been specially invited to continue the discussion. The speaker (whose paper will be published in full in the *Proceedings of the Royal Society of Medicine)* considered the subject under the following headings:—

(1) The importance of comparisons between the results of experimental work upon laboratory animals and clinical observations. Examples.

(2) The influence of the internal secretory organs upon development.

(3) The constituents of the ovary and their function.

(4) The necessity for clinical records upon the effects of oöphorectomy before puberty, during reproductive life, and during pregnancy.

(5) The effects of oöphorectomy alone as compared with oöphorectomy combined with complete hysterectomy. Influence of uterine secretion.

(6) The clinical aspect of ovarian transplantation.

(7) The influence of ovarian secretion upon metabolism, lactation, and the other internal secretory organs.

(8) The influence of the internal secretory organs upon disorders of menstruation, with special reference to precocious menstruation, menorrhagia of puberty, and early menopause.

(9) The treatment of gynæcological conditions by glandular extracts. Examples.

(10) The relationship between general toxæmias and derangements of the internal secretory organs.

Miss Louise McIlroy thought it a happy augury for future work that there should be so much collaboration between the laboratory worker and the clinician. Much confusion as to the function of the ductless glands arose from want of proper comparison of the variations in different species of animals and of the human individual. The secretory organs modified sex development, but did not cause the assumption of secondary characteristics, as these will probably be found to be due to cell development in very early embryonic life. The effects of oöphorectomy alone as compared with combined hysterectomy were mentioned, and the influence of the uterine mucosa discussed, the clinical aspect of ovarian transplantation, the influence of ovarian secretion upon metabolism, and upon menstruation in correlation with the other internal secretory organs were brought forward. Treatment of menopausal symptoms by ovarian and mammary extracts, and menorrhagia by pituitary extract by the mouth gave encouraging results. The influence of the thyroid gland upon toxic conditions was a subject of great importance in gynæcological and obstetrical conditions.

The two papers led to a very interesting discussion, in which many invited speakers took part. Among these were the President, Professor. F. H. A. Marshall, Dr. T. R. Elliott, Mr. James Berry, Dr. Leonard Williams, Dr. R. Murray Leslie, Dr. Florence A. Stoney, Dr. Amand Routh, and Dr. H. R. Harrower.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Meeting Held at the West London Hospital,
Friday, November 7th, 1913.

Clinical Evening.

The President, Dr. F. S. Palmer, showed a case of "pseudo-hypertrophic paralysis." Patient, æt. 7, the elder of two children, both boys. Began to walk at 2 years of age, but was unsteady on his legs and fell frequently. Always had great difficulty in ascending stairs. No history of familial nervous disease on either side, but a younger brother, æt. 6, is similarly affected. He presents all the characteristic features of the disease.

Case of "morbus cordis and hemiplegia." Female, æt. 22. Has always been blue as long as she can remember. Shortness of breath on the least exertion. Acute rheumatism at 17, and second attack at 19. Hemiplegia, sudden onset on the left side in March, 1912. This gradually cleared up. Her colour is remarkable from the degree of cyanosis and the clubbing of her fingers and toes is most marked. The cardiac area is still increased H.A.B. in the fifth space in the nipple line. Loud harsh bruit over the pulmonary orifice (systolic) conducted upwards and to the left. Double mitral bruit at apex, traced outwards to the axillary line. Loud aortic double bruit heard at the third right costal cartilage.

Dr. Arthur Saunders and Dr. Morton: Six cases of "early pulmonary tuberculosis in children" between the ages of 5 and 10. These cases show no physical signs on examination of the lungs, but present the following symptoms: Wasting, irritable cough and night sweats. Dr. Morton's skiagrams show very clearly enlargement of the glands at the root of the lung, and also a greater or less invasion of the root of the lung itself in every case.

Case of "congenital syphilis," shown by Dr. Russell Steele for Dr. Arthur Saunders. Child, æt. 12. Symmetrical swelling of the knee-joints. History of a rash on arms, legs and buttocks lasting three months, one year ago. Mother gives positive Wassermann. Patient is an anæmic boy, shows symmetrical swelling both knee joints, the swelling being chiefly fluid in nature. No signs of interstitial keratitis, no other obvious signs of syphilis. Wassermann strongly positive. ·45 gramme neo-salvarsan given intravenously on October 16th. No improvement has occurred.

CAPILLARY DILATATION.

Dr. Saunders: Congenital dilatation of capillaries in a child, æt. 7. Exaggerated mottling of the skin present from birth. Most marked over the malar regions, the extensor surfaces of the forearms and hands, and the flexor surfaces of the buttocks, backs of the thighs, and legs. Over the right buttock there is a line of about one finger's breadth of normal skin. There is no cardiac lesion discoverable. The hands are usually rather cold, and become cyanosed when exposed to the cold.

Dr. F. S. Palmer remarked that this case of capillary dilatation was the most remarkable he had seen. The appearance of these vascular patches suggests something between so-called port-wine stains and a modified form of Raynaud's disease. The skiagrams of early pulmonary tuberculosis in children, as exhibited, are very interesting and show the extreme importance of X-ray work in the diagnosis of early pulmonary tuberculosis in these young subjects.

Mr. Aslett Baldwin: Case of

TRAUMATIC ASPHYXIA, AND HÆMORRHAGE

into the cervical cord. Patient, æt. 26, was admitted on October 28th, having been crushed between a lift and a balance weight. He was unconscious, breathing laboriously, pulse very weak. Several ribs on the left side were broken, and there was an enormous degree of surgical emphysema, on the left side of chest, abdomen and back. His pupils were dilated and very sluggish and his colour very blue. On the 29th, he began to regain consciousness, but the emphysema continued to spread. His sputum was slightly blood-stained. On the 30th, he regained consciousness, the emphysema was disappearing, and there was much muco-purulent sputum tinged with blood. As the general blueness disappeared it was apparent that there was a permanent blueness of the skin of the face and neck, and also hæmorrhages into the conjunctivæ of both eyes. There is marked weakness and loss of reflexes in all the muscles supplied from the brachial plexus. This, he thought, was due to minute hæmorrhages into the cervical cord. The case is improving rapidly, and complete recovery should take place.

"Implantation of rib to replace loss of bone due to compound comminuted fracture of tibia and fibula." The patient sustained a compound fracture of the tibia and fibula, leaving ultimately a gap of about 4 ins. between the two ends of the bone. A piece of rib was grafted into this space and X-rays show that the bone has united to both ends of the tibia. The operation was done about 16 days ago, and new bone formation has already occurred.

Dr. Ogier Ward remarked that the case of traumatic asphyxia is opportune. The daily papers, he said, are busy discussing euthanasia in apparently hopeless cases. This patient recovered, though in the opinion of competent men he had not an hour to live. Doubtless he suffered intensely, and if once the principle of euthanasia were admitted his case would surely have been held to justify an over-dose of morphia.

Mr. Bishop Harman exhibited cases of "syphilitic uveitis."."

MORBUS CORDIS.

Dr. Harold Pritchard showed two cases of morbus cordis, both having well-marked valvular lesions, the results of acute rheumatism. Fever was present in both cases and in both bacteriological examination of the blood showed the presence of a short chain streptococcus. When first seen the two cases were thus clinically identical. The one proved to be a true case of infective endocarditis, with fever, anæmia, wasting, sweating, and the presence of arterial emboli, the patient going steadily downhill. The other case proved to be one of simple endocarditis with pulmonary emboli, the positive blood culture being presumably due to a transitory infection of the blood stream. These two cases are illustrative of the difficulty of diagnosis in the early stages between simple and infective endocarditis. They also emphasise the value of blood culture and the extreme importance of combining clinical observations with the bacteriological findings.

Dr. F. S. Palmer remarked that there were some points of resemblance in the clinical history of this case and the later developments in the case of congenital heart disease he showed. In such cases there is always the fear of septic infection. In his experience of malignant endocarditis, neither serum nor vaccine therapy had been of any use, and though he had seen them go on for months the termination has always been fatal.

Dr. Grainger Stewart showed a case of "syphilitic disease of the cervical spine" with sensory symptoms referred to the distribution of the upper cervical root areas. Patient, æt. 45. Syphilis seven years ago not treated. Eighteen months ago, fell from a cart on the back of his head. Felt pain in the neck for a few days. For the last 12 months pain gradually developing in the upper cervical areas of the left side. On examination, the area of pain is found to extend from the distribution of the fourth cervical areas to that of the fifth cervical nerves, and over this area there is diminished sensibility to all forms of cutaneous sensation. There is no evidence of any implication of the spinal cord. X-ray examination shows changes in the upper cervical spine, some destruction of the bodies of the vertebræ, and considerable overgrowth and new formation. Wassermann strongly positive.

Dr. Stewart also exhibited a case of "Toxic polyneuritis affecting specially the lower motor neurone," in a girl, æt. 17, in whom there was no constitutional disturbance and no evidence of arsenical lead or alcoholic poisoning. All deep reflexes in arms and legs were abolished. Superficial, epigastric and abdominal diminished. Plantar, flexor. Marked loss of sensibility to all forms of cutaneous sensation in the distal portion of the limbs with some loss of sense of position. General state good. Wassermann reaction of blood and cerebro-spinal fluid negative. Culture from cerebro-spinal fluid negative.

Mr. Oswald L. Addison showed a case of "Syphilitic osteo-periostitis," in a little girl. Also a case of "Abdominal tuberculosis," in a boy, æt. 13, who was admitted to the Hospital for Sick Children, Great Ormond Street. And a third case of

ACUTE APPENDICITIS AND GENERAL PERITONITIS

in a boy, æt. 7, was admitted to the hospital desperately ill, almost comatose. Under spinal anæsthesia the abdomen was opened, the gangrenous appendix removed, and tubes placed in the right iliac fossa and the right and left hypochondriac regions. For the first few days it seemed impossible that the patient could recover, two attacks of cardiac failure on the second day proving nearly fatal. The condition gradually improved, and the temperature came down, but on the 20th a residual abscess of the left iliac fossa was opened. A day or two later the whole of the left lung became solid and the temperature ranged between 104 and 102, gradually falling till it reached about normal on the 29th. During this attack of pneumonia, the original wound, which had been bathed in pus from the time of the first operation, gave way, and some coils of small intestine prolapsed owing to the constant cough. On July 1st, the bowel gave way, and by the 5th the opening had become so large that the greater part of the intestinal contents were being discharged over the skin of the abdomen. On the 5th, the partially prolapsed bowel was separated from the margins of the wound, and with great difficulty about 12 ins. of badly-damaged intestine was resected, and a lateral anastomosis performed. The temperature gradually fell to normal, and the patient took his food well, but was wasted to an extreme degree. The abdomen was flat and the patient had no pain, but some cough still persisted. Empyema had been suspected, and a careful watch had been kept. An exploration on one or more occasions proved negative. A fortnight after the enterectomy was done a fæcal fistula again formed, the wound having almost healed. As the fistula enlarged a second enterectomy was performed with the greatest difficulty. At the same time the chest was explored once more and about 1½ pints of pus were evacuated. Convalescence after this was very slow, but improvement gradually occurred, but ultimately the patient was able to leave the hospital, nearly three months after the commencement of the illness. The vitality of the child was simply amazing; even on admission to the hospital it seemed impossible that the child could live for more than a hour or two. All the operations, with one exception, were performed under spinal anæsthesia, and he was quite certain that the patient would have succumbed to any of the operations had a general anæsthetic been used. He attributed the recovery of this patient to the continuous use of saline solution per rectum, subcutaneously and intravenously, combined with the most unremitting care and attention on the part of the house surgeon and the nursing staff.

Mr. Tyrrell Gray showed three cases: (1) "Sarcoma of a keloid of the eyebrow; (2) case of "Implantation dermoid following circumcision"; (3) case of (?) "Sarcoma of the maxilla," in a boy, æt. 10.

Dr. Firth showed a man, æt. 32, with marked scoliosis of the lower cervical vertebræ. The condition has been present since birth. X-rays shows a wedge-shaped extra vertebra in the lower cervical region.

THE HARVEIAN SOCIETY OF LONDON.

Meeting held on November 6th, 1913.

Dr. Leonard Guthrie in the Chair.

Mr. Eric Gauntlett read a paper on

FRACTURES ABOUT THE ELBOW-JOINT.

The author remarked that fractures around the elbow-joint are divided into those affecting the lower end of the humerus, of which the transverse supracondyloid, the T- or Y-shaped intercondyloid, fracture of either condyle, and separation of the epiphysis are the most important, and those affecting the radius or ulna, amongst which fractures of the olecranon, coronoid, and the head of the radius are commonest. Accurate diagnosis is of the greatest importance, and in children particularly. General anæsthesia is often necessary for this purpose. Skiagraphy, although useful in cases with obvious displacement, may be most misleading in less serious injuries. Diagnosis depends on an accurate comparison of the two limbs, with special regard to the position of bony points, measurements and abnormal mobility. The various varieties of these fractures were then discussed in detail. In treatment all these fractures, with the exception of those affecting the olecranon, are best treated by full flexion, and operative interference is seldom called for, except in the case of those T-shaped fractures involving the joint. Massage should be commenced early, and passive movement at the end of the first week. The latter should be gentle, so as to avoid all unnecessary movements of the fragments. Finally, all doubtful injuries to the elbow in children suggesting an injury to the epiphysis are best treated in this manner, although the physical signs may be indefinite.

Dr. Percy Ridge read a paper on

THE PECULIAR CHARACTERISTICS OF TUBERCULOUS SPUTA.

His paper was based on valuable research work carried out on upwards of 2,000 cases, in which the albumin content and the cytological aspect had been obtained in each case. From this investigation he was able to draw conclusions, helpful both in the diagnosis and prognosis of tuberculous lesions of the lung. Wide interest was taken in the paper.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, November 6th, 1913.

The President, Mr. Robert Jones, F.R.C.S., in the Chair.

Dr. C. J. Macalister read a note on the "Treatment of Emphysema." He had noticed that in these patients the main difficulty was in expiration. He had successfully aided the expiratory forces by a band of strong elastic webbing round the chest. He showed two, patients, one a child and the other an adult male in whom the condition had been greatly relieved. The application was not used in cases where much bronchitis was present.

Dr. R. W. Buchan, Dr. S. McLellan and Dr. McAfee spoke, and Dr. Macalister replied.

Sir Dyce Duckworth read a paper on

SOME REQUIREMENTS FOR MODERN CLINICAL TEACHING.

While admitting that no intelligent member of the profession could ignore the assistance rendered by the purely scientific research worker in bacteriology, in bio-chemistry and physiology, it was still necessary to regard the practice of medicine as empirical—it was the product of experience founded upon observation. The want of the present day was training in accurate observation. He thought the old teaching in botany and the allied sciences gave a certain preparatory training in observation that had its value. He thought the scientific training to-day was pushing into too small a space the necessary clinical training and experience. In this country we had perhaps less of scientific methods in medicine, but he was sure foreign schools might copy us in the greater humanity of treating and nursing the sick. Sir Dyce Duckworth spoke of the need for training in the lost art of physiognomical diagnosis; the humoral personality of Ch. Richet was closely allied to the old diathesis, and could give a clue to many problems in clinical medicine. In treatment clinical observation must be the final court of appeal. The inherent vitality of some individuals, and even of some races, such as the Hebrew, if forgotten would lead the physician to give a gloomy prognosis and so provide triumphs for the faith and spiritual healers. Anæsthesia, anodynes, and the press of modern life had much to answer for in the over-tenderness, introspection and mawkish sentimentality seen to-day. The recommendation that we should adopt the German ideals of teachers of clinical medicine debarred all private practice and would lead to a limited outlook. The scientific staff of the training school would also need adequate remuneration, and the whole scheme was not likely to produce such good practitioners as our present plan. The object of medical education was not to pass students through examinations but to prepare them to be useful practitioners. The teacher must be human and sympathetic, not looking upon patients as mere cases. He must teach manners, he must believe in his art and pursue it with tact, common sense and genial regard for his fellow human beings, trusting to well tried methods and not running after every novelty. In being himself dignified he should dignify his profession.

Dr. T. R. Bradshaw spoke of the practical difficulties of putting all a student's clinical training into two years, which was far too short a time in which to cram all that had to be acquired. He spoke of the value of purely scientific treatment and instanced diphtheria. He also mentioned Sydenham's ideas of the constitution of fevers as an example of empirical ideas which had not proved to be of value.

Dr. R. Caton also spoke of the large amount required of the student. Six-and-a-half years was required, and yet it was proposed to further add to it.

Sir James Barr, Professor E. Glynn, Mr. Newbolt, Dr. Bennett, and Dr. R. J. M. Buchanan took part in the discussion, and Sir Dyce Duckworth replied.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

Meeting held on November 7th, 1913.

The President, Mr. A. Ernest Maylard, in the Chair.

A lecture, with lantern demonstration, on

THE PREVENTION OF MALARIA

was delivered by Dr. Malcolm Watson, Chief Medical Officer, Estates Hospitals Association, Klang, and member of the Malaria Advisory Board, Federated Malay States. This lecture will be found in another column, under the heading of "Original Papers."

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 15th, 1913.

Chlorate of Magnesia.

Chlorate of magnesia is non-toxic at the dose of 30 grains a day; it can be prescribed for months and years provided that laxatives are given from time to time, as the drug is astringent. It produces no irritation of the stomach, it is slightly vaso-constrictor, decongestionates the mucous membrane of the nose, hence its favourable action on coryza.

At the dose of 15 gr. taken twice at day, in a wine-glass of water, chlorate of magnesia provokes absorption of neoplasms. During the first two weeks the tumour seems to increase rather in size, but resorption soon begins and continues for weeks and months until the tumour disappears, but to avoid relapse the treatment should be continued for nearly two years. Chlorate of magnesia has no nocive action on the organism; it would seem rather to develop the memory and the intelligence of the individual.

For coryza it acts like a charm. Ten grains taken in water before the morning and mid-day meals, and a similar dose the following morning, or three doses in all, suffice to cure that troublesome affection popularly known as a cold in the head. Even one hour after the first dose a considerable improvement is observed.

FALLING HAIR.

Rub into the scalp each night for a week—

Precipitated sulphur, 5 dr.
Proof spirit, 6 oz.
Ess of lavender, x. min.

The next week the following solution is employed:-

Tincture of iodine, 1 oz.
Proof spirit, 7 oz.

Suspend for another week and recommence the treatment. The sulphur lotion arrests the itching and stimulates the skin. The alcoholic solution of iodine removes all the parasites (microbian) from the head and acts as a disinfectant. No glycerine should be added to either of the mixtures. The treatment is easy to follow and is unnoticed by the lay writers.

PRURITUS.

The internal symptomatic treatment of the different varieties of pruritus consists in the employment of sedatives of the nervous system, particularly such drugs as bromides and valerian.

Attention should be paid to the possible cause of the affection—parasites, diabetes, gastro-intestinal troubles (frequent cause), dyscrasia and diathesis. For this latter a severe *régime* should be prescribed, suppression of stimulants and fermentable foods—vegetarian *régime* in a word. Many rebellious cases of pruritus have yielded to a purely milk diet.

The patient will be recommended to live as much as possible in the open air, to use the morning tub and dry rubbing of the skin to stimulate its function. No flannel will be worn next the skin.

Pruritus of the Vulva.—The cause may be one of ovarian insufficiency: dysmenorrhœa, menopause, requiring ovarian opotherapy. Want of cleanliness, especially in stout women, prolapsus uteri, and above all leucorrhœa.

The treatment consists in lotions with corrosive sublimate or chloral, followed by dusting with—

Talc, 1 oz.
Camphor, ½ dr.
Starch, 1 oz.
Ess. of geranium, x. min.

In many cases a more active treatment may be required—application of a solution of nitrate of silver (1-100), or an ointment of ichthyol (1-10), while vaginal suppositories are inserted at night—

Cocaine, ½ gr.
Ichthyol, 5 gr.
Cacao butter, 1 dr.

Pruritus of the Anus.—

Nitrate of silver, 6 gr.
Distilled water, 1 oz.

Paint the region each evening. After each application the following ointment is applied:—

Ichthyol, 20 gr.
Oxide of zinc, 1 dr.
Vaseline, 5 dr.

After which the parts are powdered with—

Oxide of zinc, 1 oz.
Camphor, 20 gr.
Talc, 2 oz.

TUBEROUS ABSCESSES OF THE AXILLA.

These abscesses are very frequent, and in certain subjects return continually. Their cause is the same as that of boils—staphylococcus. Certain predisposing conditions favour their development, such as itching, sweat softening the epiderm, want of cleanliness, and also a certain disposition of the individual.

When the pus is formed a small incision with the bistoury should be made, the region being previously shaven. The thermo- or galvano-cautery should replace the lancet when possible.

After the incision the region is sprayed with some antiseptic solution, as for anthrax, a moist dressing is applied, and the patient returns to his occupation. Tincture of iodine is employed in the day time and the following pomade at night:—

Aristol, 20 gr.
Baume de Peru, 1 dr.
Stovaine, 1 gr.
Vaseline, 5 dr.

The general treatment consists of cod-liver oil, iron or arsenic.

GERMANY.

Berlin, Nov. 15th, 1913.

At the Hufeland Society Hr. Ad. Czerny showed a case of

CHRONIC PNEUMONIA IN AN INFANT.

The infant was of healthy parentage, and was æt. 10 months. The illness which was to be described dated from the seventh month. Four weeks previously a brother of the little one, who was two years older, began with whooping-cough. The illness of the infant began with high fever and cough and to all appearance it was whooping-cough also. The patient was admitted into hospital three months ago at the commencement of the illness. The condition then was very threatening. There was fever, the alæ nasi worked with the respirations, increase in size of the lungs, the ribs were strongly drawn in at the interspaces during inspiration, as also the supraclavicular spaces. Respirations were increased 72 per minute. On auscultation only a few rhonchi were to be heard at the front, but abundance of crepitant sounds, both at back and sides. There was no circumscript or absolute dulness, no bronchial breathing. The cardiac sounds were gentle and not sharp. Meteorism, the liver greatly enlarged.

The symptoms appear to justify a diagnosis of bronchopneumonia of both lungs, and especially spread over the posterior portions. The child coughed in a marked manner, but the cough had not the characteristics of whooping-cough.

Under a line of treatment that was on the whole stimulating the general condition of the patient improved slowly. The circulatory disturbances improved, as shown by the disappearance of the meteorism, diminution of the liver enlargement and relief of the dyspnœa. The fever continued for eight weeks with considerable oscillations in the range of temperature. The cough, however, was not gone even yet. Now that the fever had subsided the general condition was improving more rapidly. An interesting feature of the case was that a symptom still persisted that had been present throughout the whole of the illness, *i.e.*, the whole of the three months. Râles were to be heard over both lungs, behind from above and to below, but they had not the crepitant character of the first stages of the disease. There was no telling how long these râles would continue. The speaker would not be surprised if they still continued for some months. Every case of chronic disease of the lungs demanded that tubercle should be excluded. In his case the cutaneous test was negative and no bacilli had ever been found in the sputum. When such a case succumbed to the disease or to any intercurrent affection numerous bronchiectases were found to have been the cause, or perhaps to speak more correctly, numerous small cavities in the lungs. According to the investigations of Vogt they were most frequently associated with infection from the influenza bacillus. We knew further that the influenza bacillus was frequently found as a complication in whooping-cough and measles. As an infection most likely passed from one brother to the other, and as the brother had the whooping-cough it was most likely that the case had that pathogenesis. The formation of the little cavities in the lungs must not be put down to any special kind of bacterium. Influenza infections were very frequent in children. but only individual children acquired these cavities. It would almost seem as if there must be some anatomical predisposition. In favour of this assumption was the fact that this development was sometimes met with several times in one family. In such families several children died in a year one after another from pneumonia.

There were three points that should be mentioned. He had said the patient had been infected from a case of whooping-cough, but he had no whooping-cough, only a pronounced disease of the lungs. The brother's whooping-cough was certain. The occurrence of various forms of disease from the same infection was not a rarity. It only showed that for the occurrence of typical whooping-cough several factors must work together, which in the case related were not all present. Secondly, it appeared to him that X-ray examination was useful for diagnostic purposes in such a case. If the bronchiectasis was not accompanied by bronchopneumonia use of the rays would be negative. That was so in the case of the child. The negative result of an X-ray examination did good service in differentiating tuberculosis and the residua of chronic pneumonia from bronchiectasis. The third and last point related to treatment. From clinical observation we learned that such cases did recover, if only slowly. Whether such a recovery was anatomical admitted of doubt. As regarded the dilatation alone recovery might well be assumed, but recovery must be doubtful as far as the cavities in the lung were concerned. Of all the methods of treatment in vogue in such cases he must mention as valuable above all the so-called thirst treatment. A limitation of liquid in the food until the urine passed did not much exceed 100 c.cm., had a pronounced effect on the exudation from the lungs. By this we attained the disappearance of symptoms, and if continued long enough recovery took place so far as anatomical recovery was possible. With children beyond the infant stage the treatment could be carried as strictly and with the like results as in adults, but in the case of the infant the liquid could not be so strictly limited as in later age. The results of such withholding of liquids were not so marked as in the adult. The requirements of the infant were not, however, a contra-indication for the treatment. Even in such a case as the one under discussion the liquids should be limited as much as possible.

Hr. Ewald remarked that the case threw a light on the origination of cases of severe bronchiectasis in older children where the disease came on suddenly and without any obvious cause.

AUSTRIA.

Vienna, Nov. 15th, 1913.

Resection of Joints.

At the recent meeting of the K.k. Gesellschaft der Aerzte in Vienna, Dr. Alfred Exner exhibited a woman, æt. 27, on whom he had operated for ankylosis of the left elbow-joint. She was a hairdresser, and has suffered in 1911 from very acute rheumatism of the principal joints of the limbs. With careful, prolonged treatment, the other joints were completely restored, but the left elbow was completely ankylosed, so that the power of pronation and supination was entirely lost, as well as that of flexion and extension. The parts were exposed by bilateral vertical incisions, the ends of all three bones resected to a depth of about a quarter-centimetre, and the capsule completely extirpated, according to Payer's method. After wrapping the end of the humerus in flaps formed from the fascia lata, the bones were replaced, the wounds sutured, and the arm kept rigidly fixed for a week. Passive motion was then commenced, and with a perfect result. All the normal movements of the elbow-joint are now performed with ease and the patient follows her vocasion as before.

In the discussion which followed, Dr. O. Föderl stated that for the past twenty years he had, on the ground of results obtained from experiments on lower animals, made use of the bladders of swine and ovarian cyst walls in the construction of artificial joints after resection for osseous ankylosis; after impregnation with paraffin for the purpose of diminishing susceptibility to absorption. The fascia lata was a very suitable structure for this purpose; but it can here fulfil no other purpose than separation of the ends of the resected bones and providing for the permanence of the articular fissure. The ends of the resected bones require careful covering to the extent to which they are normally invested by the articular cartilage. And, as the soft parts around the joint retract after the operation, it is desirable that the osseous extremities should be invested with a material which strongly resists absorption, so far as the normal articular pocket extended in all directions.

Treatment of Trigeminal Neuralgia.

Dr. Julius Flesch described the results obtained by the treatment of trigeminal neuralgia with alcohol injections in over 80 cases. This method is effective in idiopathic trigeminal neuralgia—true tic douloureux—to a more satisfactory degree than that of peripheral or deep extracranial nerve-resection. In Härtel's treatment by injection of the ganglion, we have a procedure which proves to be almost as effective as extirpation of that structure. Accordingly, in every refractory case of severe prosopalgia, after failure of internal medicaments and external applications, the procedure of alcoholic injection—peripheral, deep, or intraganglionic, may be adopted; and it is only when all these have failed to give the desired result that Krause's extirpation can be rightfully resorted to.

Dr. J. Pal recommended more frequent trial of the much milder procedure of treatment with the Leduc current. Animals can be narcotised by the Leduc current, as Dr. Pal had himself demonstrated. Leduc had narcotised himself with his own current. Dr. Pal had to thank its adoption for many very satisfactory results.

Dr. J. Tein referred to other therapeutic applications of alcoholic injection which gave excellent results, but were not generally known or estimated at their true value. An example was that of severe laryngeal tuberculosis, in which the patient was unable to swallow from the intense pain. After an injection of alcohol has been made, the patient can, as a rule, swallow almost without pain in a few minutes; and the pain is frequently removed for some days, or, at least, greatly diminished. The injection can be repeated after an interval of some days. The needle is introduced, from without, between the os linguæ and the superior margin of the thyroid cartilage, so as to reach the superior laryngeal nerve.

Dr. M. Grossmann referred to the not infrequently brilliant results obtained in the treatment of tic douloureux by galvanic cauterisation of the individual turbinated bones. It may, indeed, be that centripetal stimulation of the nervus trigeminus is produced to a degree that effects alterations in the central nervous system through which the pain is abolished. It is at this result that the practitioner aims, whether he employs the usual chemical nerve stimulants (by injection of alcohol and other substances), or electrical (by application of Faradic currents), or thermal (by use of galvanic cautery), or, lastly, mechanical (by neurectomy, etc.). And by adoption of all those central stimuli, by various practitioners and in the various types of cases, to the nervus quintus, results have been obtained, which are sometimes permanent, sometimes transitory.

Dr. O. Chiari called attention to the fact that not infrequently neuralgias of the first and second branches of the nervus trigeminus owed their origin to traumatic or suppurative lesion of the corresponding maxillary sinus. In such cases the neuralgia is often permanently removed by treatment of the morbid condition of the maxillary sinus of the affected side.

The Treasurers of the Middlesex Hospital Cancer Charity have received from the Worshipful Company of Salters a grant of £150 towards the maintenance of the Salters' Cancer Research Scholarship.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH.

Proposed Eugenics Education Society in Edinburgh.

As a result of Major Leonard Darwin's address on eugenics to the Edinburgh Medico-Chirurgical Societies, a proposal is on foot to found a local Eugenics Society. A committee consisting of Sir Thos. Clouston, Dr. Berry Hart, Dr. J. W. Ballantyne, Prof. Cossar Ewart, Dr. Brock, and Mr. Smith, Headmaster of Merchiston Castle School, was appointed at that meeting, and they propose shortly to issue a circular on the subject to persons who are likely to be interested and to join the Society. The general feeling about the Eugenics Society seems to be that the subject is one of which very little is really known, and that therefore one of the chief functions of such a body would be to try and obtain accurate data, as well as to arouse public interest in the subject. Further than that it is unlikely to go at present.

Royal Hospital for Sick Children, Edinburgh.

The directors of the Hospital have appointed Dr. J. W. Simpson, Senior Extra Physician, to be Full Physician to the Hospital *vice* Dr. Melville Dunlop, whose period of office expires next month, and the vacancy created amongst the extra physicians has been filled by the appointment of Dr. Norman S. Carmichael. Dr. Carmichael is the second son of Dr. James Carmichael, who at one time was a Physician to the Hospital, and is the author of "A Manual of Diseases of Children."

The Late Dr. David Menzies, Edinburgh.

The patients of the late Dr. Menzies have erected a memorial to their former physician in the shape of a medallion in bronze at his grave. The medallion, which is the work of Mr. H. S. Gamley, A.R.S.A., is an admirable likeness of Dr. Menzies.

The Problem of Pensions for Asylums Officers.

In his report on the Roxburgh District Asylum for the year, Dr. Carlyle Johnstone, Medical Superintendent, deals very fully with legislation. Commenting on the two Asylums Officers Bills, introduced by Viscount Wolmer and Sir John Jardine respectively, Dr. Johnstone states that Lord Wolmer's measure retains the irritating restrictions and interference with the powers and discretion of local authorities which were the subject of adverse criticism last year. Sir John Jardine's Bill discards these contentious features and makes the following provisions:—Clause 1 raises the period of service for pension to 25 years, but enables women to retire at any age, while a minimum age of 50 is presented for men. At present pensions cannot be claimed by either sex until the age of 55. Clause 2 provides for the granting of allowances to attendants permanently incapacitated by illness clearly arising from their work. At present allowances can only be granted for incapacity due to injury. Clause 4 substitutes 5 years for 10 as the number of years on which the average salary for the purpose of computing pensions is to be calculated. Clause 6 allows service of one year in an asylum to be aggregated for superannuation instead of the present minimum of two years. The seventh clause places the parochial asylums and the district asylums on more of an equality than at present. The ninth and tenth clauses attempt to secure that every officer and servant employed permanently in an asylum shall be eligible for pension, and that all permanent employees habitually working with patients shall be in the first class—*i.e.*, on 1-50th of their average salary for each year of service, whereas in the second class the rate is 1-60th. The clauses also provide that grievances shall be settled by appeal to the General Board of Lunacy.

The Mental Deficiency (Scotland) Bill.

With regard to this measure, Dr. Johnstone speaks of Clause 67, legalising contributions of Boards towards laboratories as highly commendable. He thinks that the provision establishing State institutions for defectives of criminal, dangerous or violent propensities should be extended so as to include criminal and dangerous lunatics, as at present district asylums may be forced to receive murderers and other persons of most objectionable habits and character, to the annoyance and prejudice of respectable members of the community undergoing treatment. He criticises the constitution of the new local authorities, involving the abolition of the existing Boards of Lunacy and the transference of their powers, along with the duties relating to defectives under the new Act, to District Boards of Control, as a revolutionary proposal for which the reasons are not apparent, and which will probably not meet with the approval of the public. The enactment of these changes would appear to involve the reversal of the policy approved by two generations, the relegation of lunacy administration to the domain of the poor-law, the conversion of asylums into poor-houses, and the branding of every poor subject of mental disorder as in every respect a pauper.

GLASGOW.

Glasgow Maternity and Women's Hospital Bazaar.

The bazaar held in aid of this charity realised the sum of £17,000. The opening on the third day of the bazaar was made the occasion for announcing the gift, by an anonymous donor, of £3,000 for the purpose of clinical research in connection with the Hospital.

Glasgow Assessorships and the Proposed Inclusive Fee.

The contest in the election of two assessors for the General Council in the University Court cannot be said now to be waged around the question of an inclufee in medicine, whatever it was at first, as all the three candidates now pose as opponents of such a fee. The poll, which is by voting paper, closes on the 19th inst., the candidates being Dr. James A. Adams, the Rev. Dr. John Smith, of Partick, and Dr. John Hutchison, late Rector of the High School. The two last-named are in the position of seeking re-election.

The Insurance Act and Medical Benefit.

From a report of a sub-committee of Glasgow Burgh Insurance Committee, it appears that out of about 370,000 insured persons within the burgh, entitled to medical benefit, 320,000 have made arrangements, leaving 50,000 to be allocated. The number of practitioners on the panel is 380, with lists varying from zero and unity to a maximum of 4,365. The special sub-committee proposed that those insured persons who have failed to make choice of a doctor should be distributed equally among the practitioners on the panel whose lists do not exceed 2,000, but so that no list be increased beyond that number. When the matter came before the Sub-committee on Medical benefit, an amendment was adopted recommending that the maximum number be 1,500 instead of 2,000. At a meeting of the Insurance Committee on the 12th inst. they agreed, on the suggestion of the Chairman, Mr. R. D. McEwan, to remit the minute back to the sub-committee and to defer decision on the question.

Syphilis and Insanity.

At the annual general meeting of the Western Asylums Research Institute, on the 7th inst., Dr. Ivy Mackenzie, the Director of the Institute, submitted his fourth annual report. The first part of this dealt with what had been one of the two main lines of observation in the laboratory during the four years of its existence—the significance of syphilis as a factor in the causation of insanity and of mental deficiency. It was now an established fact, Dr. Mackenzie said, that a well-defined form of insanity, numbering among its victims a considerable proportion of the inmates of all urban asylums, was directly due to syphilis, and equally certain was it that no small proportion of mental defectives owed their deficiency to a hereditary form of the same disease. It was unfortunately the case that the asylum patients and defective children who were the victims of this disease represented a more or less hopeless by-product of the infection, so far as medical treatment was as yet concerned. There was no reason, however, to believe that this would always be the case. At all events, much might reasonably be expected from more comprehensive administrative measures which would admit of early diagnosis and treatment, when the original infection could be successfully combated and its consequences obviated. For the past two years, Dr. McKenzie said, he had been engaged in an exhaustive inquiry into the prevalence of syphilis in the city. From investigations relating to several thousand cases, it was believed that from 12 to 15 per cent. of the city population were at one time or another the victims of this disease. The measures taken to cope with it were insignificant compared with the powerful means which recent scientific advances had placed at their disposal.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE LOCALISATION OF INTRACRANIAL TUMOURS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I read with great interest Dr. T. Gillman Moorhead's paper on "The Localisation of Intracranial Tumours" in THE MEDICAL PRESS AND CIRCULAR of November 12th, and since Dr. Moorhead invites discussion and refers largely to my own investigations published in "The Mental Symptoms of Brain Disease" (*a*) I should be very glad if you will allow me to make a few remarks upon this important and very much neglected subject.

In my investigations I have not confined myself to brain tumours, but included cases of localised injury, hæmorrhage, and other circumscribed lesions of the brain, and I have learned from these that when the brain matter is irritated by a focal lesion, the mental symptoms will show increased manifestation, but when the brain tissue is destroyed the mental symptoms will disappear. This will account for the many cases of brain tumour (discovered at a late stage) in which no mental symptoms have been observed. Another reason why mental symptoms in cases of brain tumour are so rarely recorded is that no systematic inquiry is made into the psychical condition and character disposition of the patient. If the patient can answer ordinary questions correctly and promptly, the physician is satisfied that the patient's intellect is normal; changes of character and conduct are hardly ever inquired into. Hence the scarcity of clinical records. It is therefore all the more surprising that the few cases that are fully and accurately reported should confirm the theories advanced by me. Briefly, these are:—

Firstly, with reference to the frontal lobes, that they are the most highly developed in man as compared with all animals, and that they are essential to the manifestation of the highest powers of the intellect. Other parts of the brain may be diseased or destroyed without the understanding suffering in the least, except perhaps that the ideational activity is more or less inhibited. The larger the frontal lobes the better the emotions and passions are kept under control. When they are arrested in development or destroyed by disease self-control is diminished, and the rational man changes into a man given over entirely to the satisfaction of his lower desires. In dementia the frontal lobes suffer the most, and in idiocy and imbecility the arrested development is most marked in the anterior part of the brain. Lesions of the frontal lobes frequently give rise to a state of optimism and exaltation.

In confirmation of this theory, Dr. Gabriel Chèze, Asyle d'Armentières, France, has sent me particulars of a case of frontal tumour:—

Marie V., æt. 42 years, washerwoman, entered the asylum on the 4th September, 1909. She was brought in by the police, having walked about all night in nudity, and giving incoherent accounts of herself. On examination it was found that she had no knowledge of time and place, some difficulty of speech, no idea of simple calculation and had very defective memory. She smiled happily and had optimistic ideas. Mobility and sensibility were normal; reflexes exaggerated; pupils unequal, reacting poorly; the fundus of the eyes had not been examined. No headache; no vomiting, except just before death, five days after admission. Lying on the orbital plate of the frontal bone across the crista galli was found a tumour 9 cm. in extent, adherent to the bone and dura mater, of irregular cauliflower shape, weighing 150 grammes. Microscopical examination revealed a sarcoma. Both frontal lobes, right and left, were compressed, especially the orbital convolutions, which were partially destroyed.

Secondly, with reference to the temporal lobes, lesions of this region invariably rouse exciting emotions of anger, with or without violence; sometimes there are delusions of persecution and auditory hallucinations. It may be of interest to quote a case confirming this theory published in the *Lancet*, 7th October, 1911, by Dr. W. C. Sullivan, a case which had been reported to him by Dr. R. Cunyngham Brown, of H. M. Convict Prison, Parkhurst. The patient had murdered his wife, and while awaiting trial developed a persecutory delirium which, after a period of remission, recurred with increasing mental confusion and apathy, death occurring 17 months after the date of the crime. At the *post-mortem* examination a large tumour was found infiltrating the right temporo-sphenoidal lobe. "So far as I am aware," says Dr. Sullivan, "this is the only case on record of actual homicide in this disease." He has evidently never seen my book, in which a number of similar cases are cited.

Thirdly, with reference to the mental symptoms of the posterior part of the parietal lobes, I have also published a number of cases of tumours and other circumscribed lesions showing that simple depression up to severe melancholia happens most frequently in these cases, quite the opposite to the euphoria of the frontal lobes.

A large number of cases quoted by me are the result of head injuries, but they are not to be underestimated on that account, for the circumscribed traumatic lesion has the same significance as the experimental excitation or destruction of definite brain areas by physiologists and neurologists; in fact, clinical observation is more significant and of greater value, for the experiment is made by nature herself, and not on animals, but on man. The neurologist can produce no other but motor and sensory phenomena by his experiments. He can never produce mental results; even if he could experiment on man and excite some mental centre electrically or otherwise, he could not make his subject divulge his ideas or feelings. But because of this failure we must not conclude that the primary mental powers have no centres in the brain. They can be discovered only by clinical observation.

I am, Sir yours truly,
BERNARD HOLLANDER.

London, W., November 13th, 1913.

(*a*) Rebman, 1910.

THE ETERNAL QUESTION OF TITLES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In an old number of the *Lancet* I find a remarkable statement by Mr. Deasy, then Attorney-General, whose opinion was asked on the folowing query:—

"Whether the Licentiates, as such, of the King's and Queen's College are entitled to the degree and title of Doctor of Medicine, and to use the abbreviation or initial letters M.D. after their names?"

Answer.—"I think the Licentiates and Fellows, as such, of the King's and Queen's College of Physicians, as such, are entitled to the degree and title of Doctors in Medicine, and to use the letters M.D. after their names.—(Signed) R. Deasy. November 21st, 1860."

The Documents submitted to the Attorney-General were, I understand, the Charter of William and Mary, and the Act of the Irish Parliament 1 Geo. III., cap. xiv., made perpetual by the Act 30, Geo. III., cap. xiv., s. 11.

I am anxious to know why the claim has been abandoned, as the College does not now seem to claim the right to confer the degree or title of M.D.

I am, Sir, yours truly,
J. C. McWalter.

Dublin.
November 9th, 1913.

[Through the courtesy of Dr. Kirkpatrick, Registrar of the Royal College of Physicans of Ireland, we are enabled to answer Dr. McWalter's query. On the receipt of Mr. Deasy's opinion, the College altered its by-laws, so as to include in the diploma the following words: "certify that he has obtained, and is hereby entitled to the degree, title, and qualification of Doctor of Medicine and Licentiate of this College." Certain licentiates succeeded in having the degree registered by the Irish Branch Registrar of the General Medical Council, but the English Registrar declined to insert it. The Irish Registrar then altered his mind, and erased the title wherever he had inserted it. A conditional order to compel him to restore the qualification was discharged without costs on May 28th, 1861, but the Court did not decide as to the powers of the College to grant the degree. This point, however, was subsequently decided in a case brought specifically for the purpose in 1864 by the Provost and Fellows of Trinity College. In April, 1864, the Master of the Rolls gave judgment "that under the true construction of the Charter of the College of Physicians of 1692 its Licentiates had no authority to use the title of Medical Doctor unless the same were conferred upon them by one of the Universities." With this decision the question has since rested.—Ed. M.P. and C.]

CHRONIC INTESTINAL STASIS.

To the Editor of The Medical Press and Circular.

Sir,—I have read with intense interest Sir Arbuthnot Lane's lecture. I dare speak only for myself, but I should be astonished to have it proved that any great proportion of men in any position had until recent years—as Sir Arbuthnot Lane suggests—regarded the subject of "chronic intestinal stasis" with ridicule and derision. The condition has, perhaps, not been labelled with the name now applied, but it has been none the less recognised. I should be more astonished to learn that this condition had, in the hands of intelligent practitioners, been uniformly treated by drugs directed to the cure of "indigestion." There is no such disease as indigestion. Indigestion is merely a name given to groups of symptoms due to scores of different morbid conditions. The symptoms can be cured only by getting at the true cause. I cannot follow Sir Arbuthnot Lane in tracing the ætiology of chronically-loaded bowels to bad feeding in infancy, but it is a condition with which, with its common symptoms, every medical man must be familiar. It cannot be successfully dealt with by any treatment not mostly made up of regimen and hygiene; and failure is often due to the stupidity and obstinacy of patients who will not submit to medical discipline. A very large percentage of patients, not confined to the poor and ignorant, treat themselves with quack medicines. It is possible that in a percentage of cases abdominal section and "short circuiting" may be called for, but in view of the seriousness of the procedure and of the fact that the shock of such an operation may be, perhaps, followed by prolonged or permanent illness, it would seem desirable to try every other rational means before resorting to it. Like most general practitioners, I have rarely made notes of cases, but I have many in my memory. In a recent case, an intellectual gentleman, aged 68, some of the worst symptoms described by Sir Arbuthnot Lane had appeared, and, in addition, he had suffered from repeated attacks of vertigo with nausea and vomiting, followed by lasting sensations of giddiness. There seemed ample cause for the symptoms in neglect of the bowels and unwise dietary, and careful general examination failed to discover any other. This case has been restored to health. With the help of the patient it has been possible to clear out the bowels and keep them clear by simple means, including strict regulation of the quantity and character of the food, and abstention from alcohol in any form.

I am, Sir, yours truly,
An Obscure Practitioner.

November 15th.

THE ALCOHOL QUESTION.

To the Editor of The Medical Press and Circular.

Sir,—This alcohol question is a very simple one. If a quantity of the juice of the grape is put into a vat and fermentation begins, the sugar changes gradually into grape sugar and so on into vinegar. Now it is a common practice in the South to stop this fermentation at any stage, so that wines of various flavours may be obtained, and this is done by simply pouring into the vat some strong spirit, generally brandy. What happens is clearly that although alcohol is the result of fermentation, that process is arrested if the alcohol exceeds a certain amount. This is a purely chemical question. It is clearly of great importance that we should distinguish between a pure wine, in which there is no amount of alcohol beyond that produced by fermentation, and any liquid, such as brandy, whisky, or such like, which would stop fermentation, and therefore must act seriously on digestion.

I am, Sir, yours truly,
Robert Lee.

LONDON NERVE CLINIC.

To the Editor of The Medical Press and Circular.

Sir,—To avoid misunderstanding, I shall be extremely obliged if you can grant me a few lines of your valuable space to make it known that the London Nerve Clinic (School of Psychotherapy) is in no way connected with any other organisation, institute or clinic, staffed either by medical or lay workers, in which psychotherapeutic methods are carried out.

Moreover, that although offering treatment on psychological lines to patients of small means, as well as to the very poor, this clinic is entirely independent of outside financial support.

I am, Sir, yours truly,
Edwin S. Ash.

71, Baker Street, W.
November 15th, 1913.

OBITUARY.

DR. R. L. BOWLES.

We regret to announce the death of Dr. Robert Leamon Bowles, late of Folkestone and Upper Brook Street, W., which took place on the 15th inst., at Priors Mesne, Lydney, Gloucestershire, aged 79. The deceased, who was educated at St. George's Hospital, qualified as M.R.C.P.Lond in 1875, becoming M.D.St. And. in 1882. He was elected F.R.C.P.Lond. in 1882. Dr. Bowles was in practice as a physician at Folkestone for many years, as well as in London. He was Consulting Physician to the Folkestone Hospital, and Physician to St. Andrew's Convalescent Home. He was a Fellow of the Royal Society of Medicine, and was for some time President of the South Eastern branch of the British Medical Association. Dr. Bowles was the author of many papers which appeared in medical journals and other publications. He contributed the article "Stertor" to "Quain's Dictionary of Medicine," an article "On Sunburn" to the *Alpine Journal* in 1888, and "Observations upon the Mammalian Pharynx, with especial reference to the Epiglottis" to the *Journal of Anatomy and Physiology*. He also wrote on the "Schott Treatment" of certain diseases of the heart at Bad Nauheim, the influence of light on the skin, and other subjects. He had retired from practice some time before his death, and had been a magistrate for Gloucestershire since 1906. He was a member of the Athenæum Club.

DR. C. McBURNEY.

The death has occurred at Brookline, Massachusetts, of Dr. Charles McBurney, one of the leading medical men in the United States of America.

Dr. McBurney was born in 1845, and was Professor of Clinical Surgery in the College of Physicians and Surgeons, New York, Visiting Surgeon to the Roosevelt Hospital, and Consulting Surgeon to other hospitals in New York. Among his contributions to surgical literature are his essay on "The Technic of Aseptic Surgery" in "Gould and Warren's International Text-Book of Surgery" (1900), and his paper, with Dr. Alen Starr, "A Contribution to Cerebral Surgery" (*American Journal of Medical Sciences*, April, 1893). His name is familiar to his profession because of his description of "McBurney's point"—the exact position of pain on slight pressure in the earlier stages of appendicitis. This description occurs in a paper which he communicated to the New York Surgical Society on November 13th, 1889.

SPECIAL REPORTS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Resolution to be moved at the Annual Meeting of Fellows and Members.

On Thursday, November 20th, the annual meeting of Fellows and Members is to be held at the Royal College of Surgeons, when the senior Vice-President, Mr. G. H. Makins, in the absence of the President, who is in America, will take the chair and present to the meeting the report of the Council for the period from August 1st, 1912, to August 1st, 1913.

The following resolutions are to be submitted to the meeting:—

To be moved by Mr. J. Brindley James: "That this 29th annual meeting of Fellows and Members again affirms the desirability of admitting Members to direct representation on the Council of the College which, as now constituted, only represents those Members who also hold the Fellowship, and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation."

To be moved by Dr. A. S. Morton: "That this meeting of Fellows and Members requests the Council to include in their next annual report a balance sheet showing fully and without reserve the assets and liabilities of the College on Midsummer, 1913."

To be moved by Dr. Josiah Oldfield: "That this annual meeting of the Royal College of Surgeons places on record that it is not satisfied with the administration of the College finances as carried out by the Council, and resolves that such steps as are within its powers to take, if any, shall be taken by this annual meeting to remedy the same, and that if it has no power, the steps be taken to secure for it the necessary authority."

To be moved by Dr. W. G. Dickinson: "That this meeting, in view of the unsatisfactory nature of the regulations governing the conduct of the annual meetings, and of the small attention given to the resolutions agreed to, calls upon the Council to summon a statutory meeting of the Corporation within the next six months, in order to consider whether the annual meetings shall be continued under present conditions."

NATHAN STRAUS AND PASTEURISED MILK (*a*)

Mrs. Nathan Straus gives us an account of the work she and her husband have been doing towards saving infant life in New York. The method is the liberal supply of pasteurised milk. She regards its efficiency as shown by the fact that in the five years from its inception the death-rate for children under five was reduced from 99.0 per thousand to 76.5.

The book gives, modestly and without ostentation, the results of twenty years' experience in modifying and pasteurising milk for infants, and whether we agree that they are as great as claimed, they constitute a magnificent tribute to a great philanthropist.

Mr. Straus has devoted his time and his money to saving infant life, and he has not been disappointed. Working quietly and thoroughly he has helped to lower the death-rate for little children wherever he has gone.

REVIEWS OF BOOKS.

SMALL-POX AND VACCINATION. (*a*)

One of the most remarkable advances made in the practice of medicine during the present century is in our knowledge of the means for the production of artificial immunity against disease, yet curiously enough that method of producing immunity which is oldest and best known, and for the efficacy of which there is a greater mass of evidence than for any other, is now being more fiercely attacked than ever since its first introduction. When preventive inoculation for small-pox, or vaccination, stood alone in the field of therapeutics, with merely empirical evidence for its support, we cannot wonder that it was attacked, and attacked bitterly. Now, however, not only has the evidence in support of the preventive value of vaccination increased enormously, but the procedure itself has been brought into line with a number of other observations and a rational explanation afforded for both them and it. Vaccination as a preventive of small-pox no longer stands alone, but is merely one example of a great therapeutic method of acknowledged utility.

There is one feature in which vaccination for small-pox differs from other therapeutic measures, and it is this feature which, we believe, has stirred up against it the active hostility of so many people. Early in the last century, when the efficacy of vaccination in preventing and modifying small-pox had been established, and while the disease still continued to exact a great death-roll, the legislature made the adoption of vaccination compulsory. Such a procedure was possible while the horrors of small-pox in an unprotected community still formed a vivid picture in the minds of the people. but as the success of the enactment led to the gradual diminution of the number of deaths from the disease, the people gradually forgot the older picture in their resentment against the trouble of the procedure which had brought about its obliteration. To the parents of the present day the horrors of small-pox are practically unknown, while the troubles of a vaccinated baby are very real. Small wonder, then, that the faddist finds ready support for a propaganda which promises removal of the present evil, and the warning of those who know the risk that is being run receives scant attention. "Sufficient unto the day is the evil thereof" is the comforting doctrine which hampers the progress of all preventive medicine.

Some blame, however, must be laid at the door of the medical profession for the progress of the anti-vaccination crusade. The faddist, as is his way, has taken the trouble to make up his brief, he has devoted much skill and ingenuity to the manipulation and distortion of facts and figures, he has so altered the perspective of the picture that it no longer represents the truth, and so skilful has he become in these arts that it is often no easy matter to detect the fraud. Too many of the medical profession, satisfied with the efficacy of the measure they advocate, have neglected to make themselves conversant with the proofs of that efficacy, and so fall an easy prey to the wiles of the faddist.

Dr. Hanna has done good service to the profession and the public by the simple and clear statement of these proofs which he makes in his book. The recorded facts are stated without heat or partisanship, and the conclusions, which are drawn from these facts, follow so obviously that even the most bigoted antagonist will find little to cavil at in the method of the author.

(*a*) "Disease in Milk: The Remedy Pasteurization." Lind Guthery Straus. New York. 1913.

(*a*) "Studies in Small-Pox and Vaccination." By William Hanna, M.D., D.P.H. 8vo. Pp. 52 and xxv. plates. Bristol: John Wright and Sons, Ltd. 1913. Price 7s. 6d.

In its barest outline the case for the preventive value of vaccination may be stated as follows:—In pre-vaccination days the case mortality of small-pox varied between 25 and 40 per cent., the incidence of the mortality being greatest among children under 10 and adults over 40 years of age. At these age periods the case mortality approached 50 per cent. During the past ten years 1,163 patients suffering from small-pox were admitted to the hospitals of the city and port of Liverpool. Of these patients 943 had been vaccinated in infancy, and 220 were unvaccinated. Among the vaccinated patients the mortality was 2.9 per cent., and among the unvaccinated 27.2 per cent. Of the 943 vaccinated patients 31 were under the age of ten years, and among these there was no death; of the 220 unvaccinated patients 81 were under ten years of age, and of these 30 died. As the patients become older, and as the length of time between the vaccination and the onset of the disease increases, the death-rate steadily rises, till in later life, though it never actually equals that among the unvaccinated, it approaches more nearly to it.

We have given the baldest outline of the case for vaccination as put forward by Dr. Hanna, and must refer our readers to his book for further details, with this proviso, that the more minutely these details are examined the more strongly does the case appear. Dr. Hanna believes that his book will be useful to medical officers of health: we believe that it is a book that should be studied by every practitioner who wishes to take his part in educating the public in the fight against disease. Armed with the information that this book contains, the practitioner will be able to meet the fallacies of the faddist, to state the facts in their true perspective, and help to knowledge those whom ignorance makes an easy prey to the anti-vaccinator. To Dr. Hanna for his work, and to his publisher for the way the book is turned out, we tender our sincere thanks.

A GERMAN-ENGLISH MEDICAL DICTIONARY. (*a*)

Medical men who wish to read German medical works and who are not too familiar with the complexities of the language, will welcome this, the second, edition, of Lang's well-known dictionary. The present volume has been most carefully edited by Dr. M. K. Meyers, and it contains 4,400 definitions in addition to the more than 45,000 published in the first edition. Among the additions will be found numerous terms descriptive of diseases, signs, phenomena, etc., named after their discoverers, real or supposed. It is stated in the preface that German medical terms spelled exactly like their English equivalents have been excluded—a very wise plan if the size of the book is to be kept within convenient limits. Nevertheless, we cannot see the need for the retention of such words as "autopsie," "keratitis, "resorcin-paste," "suction," "gymnastic"—to name only a few—whose meaning is sufficiently obvious. However, the utility of the dictionary is by no means diminished by the inclusion of a few superfluous words, and it will still continue to remain the best of its kind.

THE ROYAL ACADEMY OF MEDICINE. (*b*)

The feature of this volume of the *Transactions of the Royal Academy of Medicine* is the good work recorded by several of the junior staff of the hospitals. This is particularly noticeable in the paper on the estimation of the liver function by Dr. Nesbitt, and in those by Mr. Crawford on hedonal and ether insufflation anæsthesia, and by Mr. McConnell on the location of pus in the hand. It is evident that our ideas on the relationship of the flexor sheaths to septic infection will need to be thoroughly revised. Intestinal stasis and its connection with the numerous adhesions found in the abdominal cavity has been well discussed by Mr. Wheeler. This condition is becoming more and more recognised by all operators, and it was a pity that this paper was read so late in the session that prolonged discussion on it was impossible.

The Rotunda Hospital Reports keep up, as usual, to their high standard. We congratulate the Master on the progress he has recorded. He contributes a paper on the operative treatment of pyæmia, which is probably the most important contribution to this year's *Transactions*. The results have been most encouraging. The mortality of this serious condition should be lowered by timely interference on the lines suggested by Dr. Jellett.

A case of that rare condition—typhoid spine—is recorded in a graphic manner by Sir John Moore. Mr. Hayes has an instructive paper on the X-ray diagnosis of abnormalities of the intestinal tract, which is illustrated by clear skiagrams.

The Academy is to be congratulated on the standard of the communications which have been made to it during the past year.

PROVINCIAL HOSPITAL PHARMACOPŒIAS. (*a*)

This is a most useful publication. The formulæ are given in condensed form, so that several thousands are included. It serves a double purpose. In the first place it gives the prescriber an idea of what combinations he may select in any given case; and in the second place it teaches him how various remedies may be combined to the best advantage. No medical man who actually writes prescriptions can fail to benefit by referring to this book from time to time; while for those who are unable to write a correct prescription it will prove simply invaluable. The book is produced in a handy pocket size, with somewhat sombre black boards. Might we suggest that future editions should be bound in flexible brown leather? We can strongly recommend this collection of medical formulæ which, in the majority of cases, are models of perfection.

A MANUAL OF VENEREAL DISEASES. (*b*)

The appearance of a second edition of this manual emphasises the great advances that have taken place since the publication of the first edition a few years since. The book is of special value because it represents the experience of the Army medical department in the treatment of maladies which they are able to keep under observation with more completeness than is possible in ordinary civilian practice. The first edition, it may be recalled, was the work of Colonel C. H. Melville, Colonel Sir William Leishman, and Major Pollock. The second edition has been revised and largely rewritten by Major L. W. Harrison. The serum diagnosis of syphilis is fully discussed, and it is observed that "a diagnosis of syphilis should be based on an absolutely reliable test." Noguchi's luetin reaction is also well described. As regards treatment, it is said that, properly carried out, mercurial inunction is one of the best ways of curing syphilis. The intramuscular injection of mercurial cream is essentially a military method and gives excellent results. The "cream" is made of either soluble salt, the perchloride, or preferably of insoluble metallic mercury. An all-glass syringe, with a platino-iridium needle of a rather large bore is recommended as the most suitable for the purpose—a point that will relieve those who have regarded a leather piston as indispensable. The needle is sterilised with hot olive oil. Curiously, we fail to find any mention of the familiar term "grey oil." In acute gonorrhœa vaccine treatment was found in a series of cases not to shorten the course of the malady, but the urethral secretions were found free from gonococci in the cases treated with vaccine. It appears also that vaccine lessens the incidence of epididymitis, in the cases

---

(*a*) "Lang's German-English Dictionary of Terms used in Medicine and the Allied Sciences." Second edition. Edited and revised by Milton K. Meyers, M.D., Neurologist to the Jewish Hospital Dispensary, etc. Pp. vii., 564. Philadelphia, London: J. and A. Churchill. 1913. Price 18s. net.

(*b*) "Transactions of the Royal Academy of Medicine in Ireland." Edited by J. Alfred Scott. Vol. xxxi. Pp. xl. and 498. Dublin: John Falconer. 1913.

(*a*) "Provincial Hospital Pharmacopœias." Comprising the Formulas for Medicinal Preparations used in twenty-five Hospitals and Infirmaries in Great Britain. Offices of the *Chemist and Druggist*. 1913. 2s. 6d. net.

(*b*) "A Manual of Venereal Diseases." Introduction by Sir Alfred Keogh. By Col. C. H. Melville, Col. Sir W. Leuhman, Major C. E. Pollock. Revised by Major L. W. Harrison. Second edition. London: Henry Frowder and Hodder and Stoughton. 1913. Price 10s. 6d. net.

noted to the extent of one-half. In chronic cases of gonorrhœa the greatest success was obtained by pushing the vaccine. Beyond noting a few points of interest, it is impossible in a short notice to give an adequate account of this book. Suffice it to say that it presents a compact and up-to-date account of the subject with which it deals. No one interested in the subject of venereal diseases—and what medical man does it not concern?—can afford to be without this excellent manual.

DISINFECTION AND DISINFECTANTS. (*a*)

Bacteriology owes so great a debt to the labours of our German friends that a work on disinfection by one of them commands our immediate interest. While the author's handling of his subject is by no means perfunctory, and much of the book is very well executed, some of the omissions are notable, and condensation is practised where detail is emphatically needed. In such a work it is unwise to mention the sterilisation of foodstuffs without reference to the conditions necessary to avoid failure, and when extolling the Pasteurisation of milk to ignore evidence that, given certain conditions, tubercle bacilli will survive. Actual errors are few, but bodily temperature is given as 96° F., and the tubercle bacillus is called an "obligate parasite." The translation has not been done with additions and alterations so as to include methods, preparations and apparatus used in England. With a hearty appreciation of Continental work, we think English disinfectants and disinfectors should have received more attention.

LITERARY NOTES.

"Hints for Regimental Medical Officers of the Territorial Force" (London: Foster, Groom and Co., Ltd.) is the title of a useful pocket book by Captain Grant, of the R.A.M.C. It is intended to supplement the knowledge gained during the initial course at a Territorial Force School of Instruction. For this purpose it is admirably adapted, while for rapid and convenient reference it will be simply invaluable, as it can be carried easily in the waistcoat pocket.

* * *

The appearance of the thirteenth edition of Pye's "Elementary Bandaging and Surgical Dressing" (Bristol: John Wright and Sons, Ltd.) reminds us of our student days, when we used to carry this little book constantly in our pocket for reference. It has served many generations of students and practitioners, and in its revised and improved form, under the able editorship of Messrs. Clayton-Greene and Zachary Cope, it is destined to hold the field in spite of its numerous competitors.

* * *

We have received the October number of Lewis's "Quarterly List of New Books and New Editions" which have been added to his medical and scientific circulating library during the months of July, August and September. These are not, of course, the busiest months for medical publishers, and consequently the list does not contain quite so many important works as usual, but as short notices are given to the best-known authors and subjects, the list forms a useful guide to the scientific publications for the period covered.

* * *

Mr. H. K. Lewis has just published a small book entitled "Lectures on Tuberculosis to Nurses," by Dr. Olliver Bruce, the joint Tuberculosis Officer for the County of Essex. It is a print of lectures delivered by the author to the Queen Victoria Jubilee Nurses. The book gives an excellent account of its subject, but we question greatly the advisability of describing the method of estimating the opsonic index and other matters of purely professional interest. In these days we fear nurses are being taught much which belongs rightly to the medical man alone. However, having said so much, we are bound to admit that this little work is in other respects excellent, and contains much valuable and up-to-date information.

* * *

The ebb tide of literature is usually emphasised by the flowing in of annuals, and the present is no exception. Already we have announced "Who's Who in Medicine" for 1914, and now we have received "The 'Wellcome' Photographic Exposure Record and Diary, 1914." Many of our readers are to our knowledge experts in photography, and to such this annual is, of course well known and appreciated. To others it may be commended because it condenses into one small volume clear, definite, and precise instructions on a very wide range of subjects. All the little wrinkles and dodges which long experience has taught the successful worker are here analysed and set forth in simple formulæ and exact directions such as help the beginner and serve as a useful reminder to the expert. Development, toning, fixing, printing, the various processes of production in warm tones and colours, and the methods of dealing with errors of *technique* are explained, particular attention being directed in the 1914 edition to green and blue toning and the production of various colours by development and other methods. On the subject of exposure this book is the last word, containing in addition to its light tables for each month and factors for plates and films, the special device attached to the cover which tells the correct exposure at one turn of the disc.

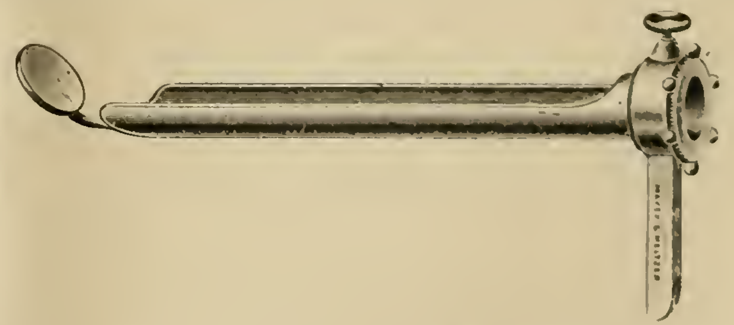
Three editions of the "Wellcome" Photographic Exposure Record and Diary are published (at the modest price of 1s), one for the Northern Hemisphere, one for the Southern, and the third, a special edition, for the United States of America, obtainable of all photographic dealers and booksellers and at all railway stations.

NEW INVENTIONS.

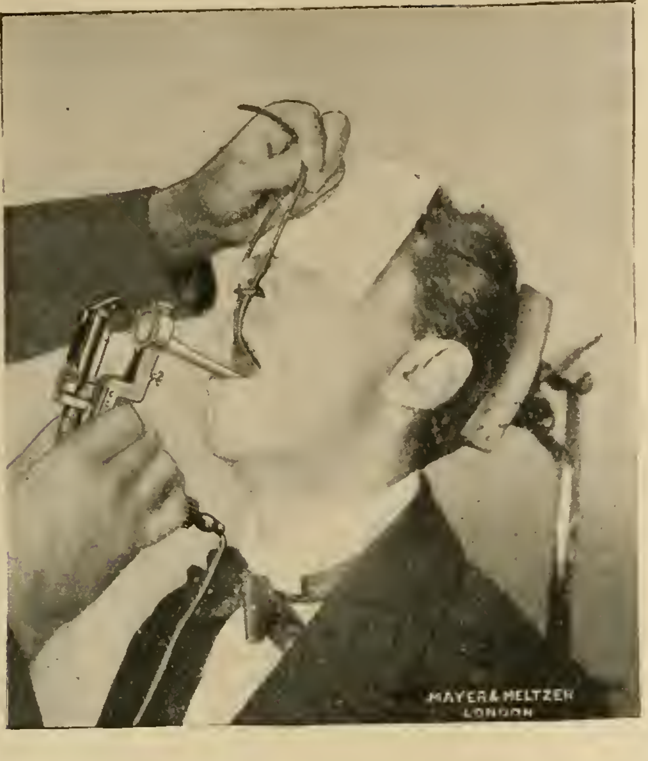
NOTE ON A NEW POSTERIOR RHINOSCOPE.

By WILLIAM LLOYD, F.R.C.S.

This instrument consists of a tubular spatula, at the end of which is a mirror which can be bent to any angle necessary for examination. The spatula is intended for use with a Bruning's handle, which it is made to fit. It is used as follows:—The ends of a piece of rubber or tubing of small diameter about 18 inches in length are passed one through each nostril and brought out through the mouth. They are then passed through the loop, as shown in the figure. The soft palate is thereby drawn forward (in the same manner as the tongue is in examination of the larynx), and so held in position. This gives ample room for the introduction of the rhinoscope. Sufficient anæsthesia is produced by spraying the floor of the nose with a 3 per cent. solution of cocaine, and the application of a 5 to 10 per cent. solution to the soft palate. If a general anæsthetic is used, it is advisable to inject a ¼ gr. of morphia an hour before the operation. The examination of the post-nasal area is considerably simplified by the use of this instrument. It gives an excellent view of the parts so that the passing of instruments into the Eustachian tubes, operations on the sphenoidal sinus, and in fact almost any operation in the post-nasal area is no longer in the nature of a step in the dark if this method is applied.



(*a*) "Disinfection and Disinfetcants." By M. Christian, Physician in Chief, Royal Institute for Infectious Diseases, Berlin. Translated from the German by Charles Salter. Pp. 107, with 18 illustrations. Crown 8vo. London: Scott, Greenwood and Son. 1913. Price 5s. net.



It will in many cases obviate the necessity for splitting the soft palate in operations on this area. I am indebted to Messrs. Mayer and Meltzer, of 71 Great Portland Street, London, for their assistance in carrying out my idea.

MEDICAL NEWS IN BRIEF.

Rotunda Hospital.

A STATED general charter meeting of the Board of Governors of the Rotunda Hospital was held on Friday. The Very Rev. the Dean of St. Patrick's presided, and there were also present—Mr. R. H. A. McComas, Mr. Henry Dudgeon, Sir William J. Goulding, Bart., D.L., Sir William Watson, D.L., Dr. E. Hastings Tweedy, Mr. R. Grant Pilkington, Sir Stewart Woodhouse, M.D., Dr. R. Dancer Purefoy, and Dr. Henry Jellett, Master.

The Primate, Sir Algernon Coote, Bart, H.M.L., and Mr. Richard Reeves wrote regretting their inability to be present.

The minutes of the last Board meeting, and of a meeting of the House Committee were read. The bank book was submitted showing an overdraft of £2,305 16s. 10d. Accounts for October amounting to £298 19s. 11d. were presented, and cheques drawn in discharge of them. The corporate seal was affixed to deeds transferring £1,630 Railway Stocks, sold to reduce the debt to the Bank of Ireland. Sundry recommendations sent up by the House Committee were considered and passed.

The Master presented to the Board, in the name of Dr. T. Percy C. Kirkpatrick and himself, the Book of the Rotunda Hospital, when it was proposed by Sir William Watson, seconded by Sir William Goulding, and resolved, "That the best thanks of the Governors be given to Dr. Kirkpatrick and Dr. Jellett for the very able, interesting and useful history which they have written of the Hospital."

It was proposed by Dr. Tweedy, seconded by Dr. Purefoy, and resolved, "That Dr. Percy Kirkpatrick be proposed to fill the office of Governor in recognition of his eminent service to the Hospital in preparing the Book of the Rotunda Hospital."

The book forms the first comprehensive history, of a large size, which has been written of the world-known Rotunda Hospital. It deals with its subject from a very broad standpoint, and will be appreciated not merely by medical men, but by every reader who is interested in the history of Dublin during the Georgian period and afterwards. Consequently it will appeal to a very large circle of readers. The profits of the sale of the book will be given to the funds of the Hospital. Pursuant to the terms of the Charter, the Board proceeded with the election of officers, when all the existing officers were unanimously re-elected for another year. After the transaction of routine business the Board adjourned.

A New Disease in the Sudan.

DR. H. B. FANTHAM, in the course of a lecture delivered last week before the Liverpool School of Tropical Medicine, dealt with the diseases of the Anglo-Egyptian Sudan. He described his pioneer researches, in company with Dr. Chalmers and Capt. O'Farrell, of the Wellcome Laboratory, Khartum, on a form of bronchitis due to a new spirochæte occurring in the respiratory passages of man. This spirochæte has not before been recorded from Africa, and very little is known about it. Both natives and Europeans suffer from bronchial spirochætosis, especially after the rains. Relapses are common, but the disease is amenable to treatment. It is widespread, endemic centres having already been found at Khartum, Omdurman, Kodok, and other places.

Associations of Non-Panel Doctors.

A CONFERENCE of Non-panel Medical Associations will be held at the Waldorf Hotel, Aldwych, on Saturday, November 29th, with the object of promoting a Federation of Non-Panel Associations. The conference is being convened by the National Medical Union, with the assistance of several leading London societies.

London School of Medicine for Women.

WE are asked to announce that the annual dinner of the Royal Free Hospital and School of Medicine for Women will be held at the Trocadero Restaurant, Piccadilly Circus, on Wednesday, December 10th, at 6.45 p.m. for 7.15 p.m. Price of tickets, 7s. 6d. J. Walter Carr, Esq., M.D., F.R.C.P., will take the chair. Applications for dinner tickets should be sent to either of the Hon. Secretaries not later than Saturday, November 29th—Dr. Winifred Cullish, D.Sc., 8 Hunter Street, Brunswick Square, or to Dr. Frederick Langmead, M.D., F.R.C.P., 47 Queen Anne Street.

The Institute of Hygiene.

A DINNER was held at the Institute of Hygiene, Devonshire Street, W., last week, to celebrate the tenth anniversary of the inauguration of the institute. Sir William Bennett occupied the chair, and amongst those present were Sir James Mackenzie Davidson, Sir Ronald Ross, Dr. Arthur Newsholme, Principal Smith, Sir Thomas Oliver, Mr. Grant Ramsay, and Dr. Murray Leslie.

The Mary Kingsley Medal.

THE Mary Kingsley Medal of the Liverpool School of Tropical Medicine was presented last week to Mr. F. V. Theobald, M.A.Camb., F.E.S.

Mr. F. C. Danson, Chairman of the School, read a letter from Sir Ronald Ross, who said that few people had played such a leading part as Mr. Theobald in the more modern development of tropical medicine and sanitation. He had made a complete study of mosquitos, on which he had written a work in five volumes which was a masterpiece.

Mr. Theobald is on Officer of the Imperial Order of the Osmanieh, Vice-Principal and Zoologist of the South-Eastern Agricultural College, Wye, and a foreign member of the Association of Economic Entomologists, Washington.

National University of Ireland.

AT the annual meeting of Convocation of the National University of Ireland the following resolutions were passed:—

"That the members of Convocation of the National University of Ireland request the Senate to create a special degree or diploma in Ophthalmology."

"That we, the members of Convocation of the National University of Ireland, request the Senate to institute lectures to be delivered to qualified medical practitioners in order to train them to become Medical Inspectors of Schools, and we further request the Senate to create a special degree, diploma, or certificate, to be conferred on those who pass a special examination."

Calls to the Bar.

The following members of the medical profession were called to the Bar on November 17th:—

Lincoln's Inn.—A. B. Dunne, Queen's Coll., Camb., M.B., B.C.

Inner Temple.—L. F. Hemmans, M.B., B.S., Durham.

Middle Temple.—H. T. Treeves, M.R.C.S., L.R.C.P., and H. W. G. Macleod, B.Sc., M.R.C.S.

Gray's Inn.—W. Moir, M.D. C.M., Aberdeen Univ., B.Sc. Victoria Univ., Manchester; G. E. Oates, M.D., B.S.Lond., M.R.C.P.Lond., D.P.H.Camb.; G. Sowden, M.D.Brussels, M.R.C.S., L.R.C.P.Lond, D.P.H. Camb.; and D. C. Kirkhope, M.D., C.M.Glasg., D.P.H.Camb.

The Royal College of Surgeons of England.

At the Primary Fellowship Examination for the Fellowship of the Royal College of Surgeons of England in Anatomy and Physiology, held on November 5th, 6th, 11th, 12th, 13th, and 14th, for which 129 candidates presented themselves, of whom 44 were approved and 85, or 66 per cent., were rejected, the following candidates were approved, namely:—

R. G. Bannerman, M.A.Edin., S. G. Billington, M.B., B.S.Lond., T. J. Cobbe, M.B., B.Ch., B.A.O., R.U.I., H. E. C. Collins, R. M. de Mowbray, M.R.C.S., L.R.C.P., I. F. Diay, E. H. Eastwood, G. W. Marshall Findlay, A. G. T. Fisher, M.B., Ch.B., M.R.C.S., L.R.C.P., J. A. C. Forsyth, M.Sc., M.B., Ch.B., H. H. M. Gould, B.A.Camb., H. E. Griffiths, R. M. Handfield-Jones, W. L. Holyoak, M.D., B.S.Lond., H. T. Hunter, M.B., B.S.Dur., L. G. Jacob, B.A.Camb., M. K. Joshi, M.R.C.S., L.R.C.P., T. Julian, M.B., Ch.B.New Zealand, O. R. M. Kelly, M.B., B.S.Lond., R. Kennon, M.B., Ch.B.L'pool, M.R.C.S., L.R.C.P., W. A. Lincoln, M.D., C.M.McGill, E. A. Lindsay, M.R.C.S., L.R.C.P., D. Loughlin, M.B., B.S., M.R.C.S., L.R.C.P., P. G. McEvedy, A. D. Marston, L.D.S., J. C. Metcalfe, M.B., Ch.B.Leeds, E. T. C. Milligan, M.D., B.S.Melb., H. W. L. Molesworth, G. T. Mullally, M.B., B.S.Lond., M.R.C.S., L.R.C.P., E. F. Murray, M.D, B.Ch.St. And., G. E. Neligan, M.A., M.B., B.Ch.Oxon, M.R.C.S., L.R.C.P., J. M. O'Donovan, R. F. O'Sullivan, M.B., B.S., M.R.C.S., L.R.C.P., J. H. Pendered, B.A., M.B., B.C., M.R.C.S., L.R.C.P.Camb., G. Perkins, J. H. Rawlinson, M.B., Ch.B.L'pool, W. H. C. Romanis, B.A.Cantab., A. Shafeek, M.D.Cairo, M.R.C.S., L.R.C.P., J. C. Storey, M.B., Ch.M.Syd., A. Sunderland, D. G. C. Tasker, B.Sc, R. A. R. Wallace, M.B., Ch.M.Syd., J. R. M. Whigham, M.B., B.S., M.R.C.S., L.R.C.P., and M. H. Whiting, M.B., B.C.Camb.

The following candidates have been admitted members of the College:—

C. S. Archer, W. S. Armitage, C. S. Atkin, B.A. Camb., F. G. Bell, F. V. B. Bevan, W. G. Bigger, B.A.Camb., G. A. Bird, J. Bostock, G. J. Bowen, H. J. Bower, E. J. Bradley, E. H. P. Brunton, B.A. Camb., N. St. J. G D. Buxton, J. Byrne, E. W. Carrington, B.A.Oxford, F S. Charnock, F. B. Chenoy, F. Cook, G. M. Coope, E. Coplans, C. H. Crawshaw, W. L. G. Davies, H. V. Deakin, H. S. de Boer, H. R. Dive, A. R. C. Doorly, E. J. Eacrett, A. T. Edwards, B.A.Camb., H. el Arculli, A. S. Erulkar, A. R. Esler, W. S. Evans, J. M. Evatt, B.A.Camb., B. J. L. Fayle, B.A.Camb., M. Ffoulkes, A. C. Hancock, R. J. Harley-Mason, F. T. Hill, T. A. Hindmarsh, E. W. N. Hobhouse, B.A.Oxford, O. R. Horwood, H. F. Hutchinson, T. H. James, G. B. Jameson, F. E. Johnson, R. B. Johnson, C. Kingston, J. I. F. Knight, N. C. Lake, J. F. Lauder, J. L. D. Lewis, C. C. Ling, W. H. Lister, G. H. Loughborough, O. G. Maginness, D. Mallam, G. N. Martin, E. E. Mather, B.A.Oxford, H. Mather, J. Millard, G. H. Monrad-Krohn, J. Y. Moore, W. Morris, J. T. Morrison, M. B. O'Sullivan, H. B. Owens, H. W. Parnis, W. P. Penhale, V. C. Pennell, J. A. Perera, A. S. Plant, J. Precopoulos, E. Rayner, B.A., M.B. Camb., S. Jessie Scott Reid, Evelyn Ritson, C. S. L. Roberts, W. E. R. Saunders, A. E. Schokman, L. E. S. Sharp, G. D. Sherwood, B.A.Camb., A. C. S. Smith, A. J. E. Smith, H. J. D. Smythe, A. K. Soutar, B.A.Camb., T. S. Stafford, W. A. Stewart, J. W. Stretton, B.A.Camb., W. V. T. Styles, L.D.S.Eng., W. E. Tanner, J. W. Thomas, J. A. Tsoi-A-Sue, F. C. Turnbull, C. B. Vakil, W. H. von Wyss, J. G. Wardrop, C. W. Wheeler-Bennett, B.A. Oxford, C. E. Williams, L.D.S.Eng., H. A. Williams, B.A.Camb., F. E. S. Willis, C. W. Wilson, H. G. Wiltshire, B.A.Camb., and H. G. Winter.

University of Oxford.

The following degrees have been conferred:—D.M.—H. G. Butterfield, Wadham; A. F. S. Sladden, Jesus; and L. T. Burra, University.

Royal Sanitary Institute.

The following new members have been elected:—Herbert S. Baker, M.R.C.S., L.R.C.P.Lond., William A. Berry, M.B.Lond., D.P.D.Oxon., Girish C. Chatterjie, L.M.S.Punjab, James A. Giles, M.B., B.S., D.P.H., Farquhar Macrae, M.B., Ch.B., M.D., James Orr, L.R.C.P., L.R.C.S.Ed., D.P.H., William G. Savage, M.D., M.B., M.R.C.S., L.R.C.P.

Trinity College, Dublin.

The following candidates have passed the final medical examination, Part I., Michaelmas Term, 1913:

Isaac W. Corkey, James N. Armstrong, passed on high marks; Amos G. Varian, Richard O'Kelly, Bertrand C. O. Sheridan, Geraldine Murphy, Francis A. L'Estrange, Thomas W. G. Johnson, Clara B. M. Adderley, Hilda M. B. Marsh, William McE. Snodgrass.

Jurisprudence and Materia Medica.—Cecil G. Sherowitz, Albert W. D. Magee.

Pathology.—Robert L. Vance.

Diploma in Public Health, Part I.—George H. Culverwell, M.B., Jas. A. Haran, M.D., C.M.G., Jane F. Colquhoun, M.B., Matthew McKnight, M.D., George F. C. Healy, M.D. Part II.— James A. Haran, M.D., C.M.G., Reginald H. Lee, M.B., Capt. I.M.S.

Final Medical Examination, Part II.—Medicine.—Eleanor E. Taylor, William F. Gibson, Frederick G. Flood, Ernest Banery-White, J. T. McCullagh, William de M. Peyton, John D. Oliver, Blacker C. Powell, Rupert C. Lowe, James C. McWalter, William S. Boyd, Herbert E. Murray.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "**Reader**," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

IMPORTANT WARNING TO THE PROFESSION.

MESSRS. J. AND A. CHURCHILL inform us that there is a warrant out for the arrest of a man who professes to be travelling books for them, but who has never been employed by the firm. He calls on practitioners with samples of their books and seeks to obtain orders and payments. Among other names he uses those of Williams and Longford. They ask that he should be detained while the police are communicated with.

NON-PANEL MEDICAL SOCIETIES.

WE are asked to notify that the conference of non-panel medical associations, referred to in our last issue, will be held in London at the Waldorf Hotel, on November 29th, at 3.0 p.m. The National Medical Union, with the assistance of several leading London societies, is responsible for convening this meeting. Invitations are being issued to all known non-panel bodies, and the chief object of the conference is the promotion of the federation of non-panel organisations throughout the country.

R. P. S. (Hants).—Excision of the spleen does not, as a rule, cause any greater disturbance of bodily function than would the removal of a large cluster of lymphatic glands from the neck, axilla, or groin. After splenectomy the patient may experience pains in the long bones, and he may have some pyrexia. There is often a considerable degree of leucocytosis. These untoward symptoms gradually subside.

FLETCHERISM.

A CORRESPONDENT asks "What is Fletcherism?" As far as we understand the cult it is Americanism, and might not inaptly be described as "chewing the cud" by human beings as an aid to digestion. It implies that one should continue chewing indefinitely, so long as there is anything in the mouth, and that it should not be swallowed until every atom of flavour has vanished from the particles within reach of the teeth.

M.B.CANTAB. (London, W.).—Our correspondent might try injections of fibrolysin in his case of painful contraction of the finger. It is needless to say that the strictest aseptic precautions must be observed. One ampoule, or 2.3 c.c. may be injected three times a week in the neighbourhood of the scar.

A MEMBER OF THE INSTITUTE.

IN reply to your query, the latest weekly report of the Registrar-General showed that the births were about double the number of deaths, and that in each case the rate was considerably lower than the average.

L. T. (Gloucester) would find the solid, concentrated culture media, in powder form, known as "Solmedia," very useful for preparing quickly and readily any tube of sterile medium that may be required to grow a particular organism. The media are not expensive and have been found quite satisfactory. Messrs. Baird and Tatlock, London, E.C., are the sole agents.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, NOVEMBER 19TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1 Wimpole Street, W.).—5 p.m.: Dr. Charles Singer: St. Hildegarde. Dr. John Rolleston: Medical Aspects of the Greek Anthology (Part I.). Dr. Raymond Crawfurd will show a collection of "Touch Pieces." Dr. F. W. Cook will show some Old Surgical Instruments.

ROYAL METEOROGICAL SOCIETY (Institution of Civil Engineers, Great George Street, Westminster, S.W.).—7.30 p.m.: Papers: Mr. W. H. Dines: The Daily Temperature Range at Great Heights. Mr. H. Harries: Eddy Wind of Gibraltar.

ROYAL MICROSCOPICAL SOCIETY (20 Hanover Square, W.).—8 p.m.: Communications: Mr. F. W. Chapman: Notes on the Shell Structure in the Genus Lingula—Recent and Fossil. Mr. J. C. Kershaw: Development of the Embiid.

THURSDAY, NOVEMBER 20TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Cases by Sir Malcolm Morris, Dr. Dore, Dr. Pringle, Dr. Adamson, Dr. Walsh, Dr. Dudley Corbett, Dr. Haldin Davis, and Dr. Pernet.

FRIDAY, NOVEMBER 21ST.

ROYAL SOCIETY OF MEDICINE (SECTION OF OTOLOGY) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. W. H. Kelson, Mr. F. Muecke, Mr. G. J. Jenkins, and others.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS) (1 Wimpole Street, W.).—8.30 p.m.: Discussion on the Technique and Standardization of Bismuth Meals. Opened by Dr. Reginald Morton.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Paper: Dr. M. Watson: The Prevention of Malaria in Rural Districts (with epidiascope demonstration). Demonstration: Dr. H. Bayon: Lupoid Leprosy and the Results of Treatment of Leprosy by means of a Cultural Extract.

SATURDAY, NOVEMBER 22ND.

PLYMOUTH MEDICAL SOCIETY (Athenæum Chambers, Athenæum Lane, Plymouth).—8.30 p.m.: Discussion on the Treatment of Suppurating Appendicitis (opened by Dr. H. W. Webber).

MONDAY, NOVEMBER 24TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Clinical Evening.

ROYAL SOCIETY OF MEDICINE (SECTION OF ODONTOLOGY).—8 p.m.: Mr. F. St. J. Steadman: Case of Rheumatoid Arthritis Cured by the Removal of Septic Teeth. Dr. T. J. Horder: Dental Sepsis from the Point of View of the Physician.

TUESDAY, NOVEMBER 25TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF MEDICINE).—5.30 p.m.: Dr. A. M. Gossage and Dr. Braxton-Hicks: Two Cases of Non-Cancerous Tumour of the Stomach. Dr. Newton Pitt: A Calcareous Deposit on a Fish Bone in the Parotid Duct. Dr. Batty Shaw and Mr. R. Higham Cooper: Osteomalacia occurring in a Case of Atrophy of the Testicles. Dr. Percy Kidd: Case of Combined Sclerosis of the Spinal Cord with (?) Dystrophia Adiposo-genitalis. (The case will be shown at 5 p.m., previous to the meeting.)

Appointments.

CARLING, E. ROCK, M.B., B.S.Lond., F.R.C.S.Eng., Demonstrator of Surgical Anatomy at Westminster Hospital Medical School.

D'ALTON, J., Certifying Surgeon under the Factory and Workshop Acts for the Banagher District of King's County.

EVANS, ARTHUR, M.S., M.D.Lond., F.R.C.S.Eng., Teacher of Operative Surgery and Demonstrator of Surgical Pathology at Westminster Hospital Medical School.

FISHER, E. G., M.R.C.S., L.R.C.P.Lond., Medical Registrar and Tutor to the Royal Infirmary, University of Liverpool.

HALL, J., M.B., B.Ch.R.U.I., House Surgeon at the Royal Victoria Hospital, Belfast.

MOXON, FRANK, M.B., B.S.Durh., Honorary Ophthalmic Surgeon to the St. Marylebone General Dispensary.

NIX, R. E., M.B., B.C.Cantab., Certifying Surgeon under the Factory and Workshop Acts for the Chatteris District of the county of Cambridge.

ORR, VIVIAN B., M.B., B.S.Melb., Lecturer on Anæsthetics at Westminster Hospital Medical School.

Vacancies.

Certifying Factory Surgeon.—The Chief Inspector of Factories announces the following vacant appointment:—Clackmannan (Clackmannan).

Down County Council.—Assistant Tuberculosis Medical Officer. Salary at the rate of £350 per annum. Applications to R. MacIlwaine, Secretary. (See advt.)

Cheltenham General Hospital.—House Physician. Salary £100 per annum, with board, lodging, and washing. Applications at the Hospital, W. H. Head, Secretary.

Victoria Hospital for Children, Tite Street, Chelsea, S.W.—Senior Resident Medical Officer. Salary £120 per annum, with board, residence, and washing. Applications to the Secretary.

Derbyshire Royal Infirmary.—House Surgeon. Salary £100 per annum, with apartments, board, etc. Applications to the Weekly Board.

Stirling Royal Infirmary.—Resident House Surgeon. Salary £100 per annum, with board. Applications to James Dobbie, Solicitor, Stirling.

Argyle and Bute Asylum, Lochgilphead.—Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, and laundry. Applications to the Medical Superintendent.

Parish of St. Giles, Camberwell (Infirmary).—Assistant Medical Officer. Salary £180 per annum, with apartments, board, and washing. Applications to Medical Superintendent of the Infirmary, Brunswick Square, Camberwell.

Births.

BARKLEY.—On November 14th, at Athbeagh, Sandy Lane, Cheam, Surrey, to Dr. and Mrs. James Barkley—a daughter.

JOHNSTON.—On November 13th, at The School House, Highgate, N., to Dr. and Mrs. J. A. H. Johnston—a son.

LINDSEY.—On November 6th, at "Beaumont," Irving Road, West Southbourne, Bournemouth, the wife of Mark Lindsey, M.R.C.S., L.R.C.P., of a son.

Marriages.

DUCKWORTH—LEMAN.—On November 12th, at Christ Church, Lancaster Gate, Edward Dyce Duckworth, I.C.S., eldest son of Sir Dyce Duckworth, Bt., M.D., of 28 Grosvenor Place, S.W., to Cecil Gertrude, youngest daughter of Robert E. Leman, of 22 Westbourne Terrace, W.

ELLISON—LAMBERT.—On November 15th, at St. John's Church, Ealing, Dr. John Ellison, of Cromer, to Dorothy, elder daughter of Mr. and Mrs. Arthur Bradley Lambert, Westbury, Ealing.

Deaths.

BOWLES.—On November 15th, at Priors Mesne, Lydney, Gloucestershire, Robert Leamon Bowles, M.D., F.R.C.P., late of Folkestone and Upper Brook Street, London, aged 79.

SHORTT.—On November 9th, at 6 Queen's Road, Ealing, Dr. William Rushton Shortt, M.D., M.R.C.S., L.R.C.P., fourth son of the late Rev. Edward Shortt, of Woodhorn, Northumberland, and of Mrs. Shortt, of 6 Queen's Road, Ealing.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, NOVEMBER 26, 1913. NO. 22.

NOTES AND COMMENTS.

The Mountains in Labour. It is now many months since the Superintendent of the Southwark Infirmary attributed eight deaths from enteritis in that Institution to infection conveyed by flies from a number of railway trucks kept habitually by the Camberwell Borough Council. The latter body replied to this soft impeachment by a report from its Medical Officer of Health, who proved to his own satisfaction that dust could not be blown more than a few yards from the trucks, therefore infection could not be conveyed by flies. Southwark, however, was not silenced by this scientific bombshell, and called in the aid of the Local Government Board, who sent down one of its inspectors, Dr. Fletcher, to visit the Infirmary. He decided that there was not sufficient evidence to connect the outbreak of enteritis with the Camberwell dust, but he nevertheless concluded that the use of the railway siding for such a purpose should be discontinued. Two months have elapsed since this mildly elusive and velvet-gloved decision was communicated to the Camberwell Borough Council, who have done absolutely nothing so far to remedy the nuisance. Meanwhile the advent of cold weather rids the district of flies for the time being—so that the defenceless inmates of the Southwark Infirmary are relieved of one ever present danger of infection.

The L.G.B. Mouse. The mountains of the Local Government Board, as a result of their labour, have given birth to nothing stronger than a ridiculous mouse. A South London Borough simply ignores the mild exhortations of the Board. Could one have a better instance of the futility that marks much of the administration of the L.G.B.? After two months' delay that body has requested Camberwell to take "immediate steps to abandon the use of the railway siding." Where is the efficiency that one had hoped would rejuvenate the Board with the advent of Mr. John Burns, the strong man of the Government, to whom the prompt and effective handling of emergencies belonged as a second nature? Have his volcanic energies been smothered by the sheer weight of a Government office? Is he to be staved off from dealing with a fatal outbreak of enteritis by the shuffling evasions of a Borough Council, the guilt of which stands self-confessed in the shape of truckloads of filth close to the windows of a crowded Poor Law Infirmary. But the L.G.B., let us hasten to add, has an eye also to the future, for it has signified to Camberwell its wish that "the whole question of the arrangements to be made for the disposal of refuse will receive the serious attention of the Council." May it be permitted to echo this pious wish—and to trust that the siding will be gone before the next fly season arrives.

Sir Victor and the Suffragettes. A meeting of the Liberal council of the Harborough Division was held at Leicester on Saturday last to consider the representation of the constituency in view of the differences between the executive and Sir Victor Horsley, the prospective candidate, on the subject of militant suffragism. A report had been presented by the executive stating that Sir Victor's attitude towards woman suffrage, his controversy with the Government in respect to forcible feeding, and in regard to the Act passed to meet the wishes of those who thought with him, and his participation in a movement to secure a free pardon for Mrs. Pankhurst all tended to alienate from the party electors. Sir Victor Horsley was invited to speak and controverted all the points in the roport. He denied that he had made woman suffrage the most important question in his campaign, said he had always repudiated militancy, and contended that his position had been misunderstood and misrepresented. After discussion a resolution endorsing the action of the executive and regretfully cancelling the candidature was adopted by 81 to 17. Sir Victor had stated that he would accept the decision of the council.

Medical Men and the Speed Limit. THE most practical result of the adoption of the motor car by medical men has been the economy of time effected in the routine of busy practice. Most practitioners who have "changed over" from a horse carriage to some type of mechanically propelled vehicle, provided that the same is reliable, can testify to the fact that they have saved many hours in the course of the week of valuable time that hitherto would have been consumed in travelling from house to house. The general public has been the gainer also, for the call to visit a sick person can now be responded to in one-third the time by means of the modern, ever-ready-to-start, silent-running car, as compared with that required to put in a horse and drive thither. In the interests of the sick it is desirable that medical aid should be obtained as speedily as possible; indeed, it is not too much to say that, in many cases of emergency, the matter of a few minutes may make all the difference between the life and death of the patient. Can it be wondered, therefore, if medical men sometimes exceed the speed limit in towns in their anxiety to save life and to relieve pain? And yet the plea of emergency has not always succeeded in freeing the practitioner from the necessity of paying a fine in the courts for infringing this otherwise salutary by-law. The medical men in Tours have recently petitioned the councillors of that city to allow their motors to be exempt from the funereal pace of six and a half miles an hour within the city precincts, decreed by the Mayor some time ago. Their very just demands were not acceded to on the grounds that "we do not see our way to permitting doctors, in addition to the other means which they possess, and which we cannot control, to kill their fellow-citizens by running over them." A municipal edict of this kind would hardly be taken seriously on this side of the Channel.

Alleged False Medical Certificate. As the result of a recent inquest, Dr. Alexander Girvan, of Lower Belgrave Street, London, has been brought before the Westminster magistrates. The facts were that a domestic servant died last September in a Pimlico nursing home under somewhat mysterious circumstances. A coroner's inquiry was held and it was found that the deceased died as the result of an illegal operation, and the jury returned a verdict of wilful murder against some person or persons unknown. Dr. Girvan was at once arrested on a charge of having unlawfully made a false declaration concerning the death in question. He himself sent the deceased to the nursing home, but according to the evidence of the matron of that institution, said nothing about her condition that led her to suspect the real nature of her illness. In any case a medical man signing death certificates under such circumstances is placing himself in an entirely false position.

LEADING ARTICLES.

THE BRITISH MEDICAL ASSOCIATION.

THE affairs of the British Medical Association, it will be generally admitted, are of first-rate importance to medical men throughout the British Empire. The fortunes of the profession, of which it forms the chief representative organisation, are closely involved in its success or its failure. Of late years the Association has passed through troublous times, the main facts of which are familiar to our readers and need not be here detailed. The most serious aspect of the present position is apparently to be found in the finances of the Association, the deplorable condition of which is shown conclusively in the last balance-sheet issued by the Council. A careful study of that document is calculated to disturb the confidence of any candid critic. How a body possessed of so splendid a property as the *British Medical Journal* can be habitually short of money demands full and adequate explanation. If the work of the Association cannot be carried on without adopting the devices of a spendthrift, then it is surely time to face the crisis fairly and squarely. The subscription of members was some years ago raised from one guinea to twenty-five shillings; it is now proposed to raise it to two guineas. The price of advertisements in the journal, already high, has been substantially increased. The council is now asking the Association to obtain further financial corporate powers. It asks specifically for alteration of the memorandum of the Association, so as to allow a far freer dealing with the property of the members. The most significant proposal, however, and the one that demands the most critical consideration of members is that contained in clause 7 of the proposed alterations, namely, "To borrow any moneys required for the purposes of the Association upon terms and upon such securities as may be determined." This proposal suggests some reflections as to the real responsibility for the unsuccessful finance of the Association. During recent years many communications have been sent to THE MEDICAL PRESS AND CIRCULAR from men who have occupied the highest official positions in the Association. They one and all agree that the weak point in the organisation is the fact that the management of the Association has drifted into the hands of a few men. Years ago this controlling band was nicknamed the "vital centre." The new constitution of the Association was framed with a view of decentralising control. It has proved a failure. The referendum to branches is a farce. The central executive is able to flout and defy the adverse opinion of members, as proved by its retention of office in face of the storm of indignation stirred up by the acceptance of a Government post by Mr. Smith Whitaker, its then Medical Secretary. The control of members, in a word, is less to-day than ever it was over their own affairs. Happily, the whole matter is still, so to speak, in the melting-pot, for on Wednesday, December 3rd, the proposals for the alteration of constitution will be submitted to an extraordinary general meeting of members at the Connaught Rooms, London. It may be well, before members endorse the recommendations of the Council, to demand an inquiry into the financial management of the Association, especially into that of its journal, and to insert an amendment, if that be in order, limiting the central and extending the democratic or general control of the Council. It is not so long ago that the affairs of the Association were in a flourishing condition. At the time Mr. Ward Commer was president at the Plymouth meeting we believe that there was some £84,000 standing to the credit of the Association, and that with a considerably smaller membership than that which is now threatened with bankruptcy. The government of the body during this downward process has been centralised in a few hands, and it is high time that the activities of this central clique should be curtailed by the introduction of a wholesome democratic control. The phenomenon is not a new one in medical history. Centralisation, indeed, has always been the curse of the medical profession. The absorbing nature of professional work leaves it open to a few enterprising men to shape matters so as to bring corporate control within their own hands. This evil dominating power is to be seen in our qualifying corporations, in our scientific societies, in our public appointments, in our medico-social and other organisations. In the case of the British Medical Association the time has come, in our opinion, for plain speaking and for prompt action, if the future safety of our one and only great medical organisation is to be secured. It is to be hoped that a sufficient number of members will attend the meeting of December 3rd to ensure a thorough examination of existing conditions before placing additional powers in the hands of those whose stewardship has so far resulted in admitted failure.

CURRENT TOPICS.

Colour Dangers.

The colour red has been used to signify danger from time immemorable. A warning is attached to its occurrence in such divers affairs as women and railway-signals. It colours the badges of Socialism, Ulster, and the Transport Union, the ties affected by Oscar Wilde, and the street-corner receptacles of the G.P.O. It is altogether girt about with sinistry. For many of these purposes red is as good a colour as any other, but in those cases where it is needed most its inferiority is most marked. In railways and at sea lives depend upon its prompt unerring recognition, and in particular on its easy differentiation from green. For both these purposes the chosen colours are about the worst possible. In military uniforms the scarlet tunic is said to be the second most invisible, yielding only to khaki; red paint fades quickly on exposure to the sun and requires frequent repainting; and, above all, red and green are the colours most apt to be confused. About one man in twenty-five has a deficient colour sense, and by far the most common deficiency is an impaired susceptibility for red. It seems a fine example of the principle of the cussedness of inanimate objects—which makes the buttered side hit the floor—that men made such a pitiful selection. It is probably a remnant of our bovine days, when grass was a cool and pleasant green, while blood ran hot and red. Blue and yellow would be much more suitable colours from every point of view, and it is beyond the limits of possibility that they will be adopted. We always prefer the old to the better. How many medical men use the metric system?

Leprosy in the British Empire.

To the general public it may come somewhat as a surprise to learn that there are, at the present moment, about fifty lepers living in England, yet medical men know that isolated cases of leprosy appear from time to time in this country. Now and then a case is treated at one or other of our large infirmaries, but it frequently happens that the patient has to be quietly transferred to some other institution as soon as the real nature of his malady is noised abroad. Few diseases create such a scare in a hospital as leprosy, though the danger of contagion is probably less than in the case of the average consumptive. In a lecture delivered last week at the Royal Society of Medicine, Dr. H. Bayou, Research Bacteriologist to the Union Government of South Africa, stated that only one of the lepers now resident in England had acquired the disease in the United Kingdom. While a specific and sure method of treatment has yet to be found, the experience gained at Robben Island and in South Africa shows that for all advanced nodular stages chaulmoogra oil, or preferably its refined constituent, "anti-leprol," injected intra-muscularly in doses of 3-5 c.cm. at a time, remains the best palliative treatment. Early macular cases seem to respond better to other forms of treatment, such as a cultural extract prepared from Kedrowsky's isolation of the micro-organism of leprosy on similar lines to Koch's alt-Tuberkulin. While leprosy is but slightly contagious if proper sanitary precautions are taken, and any form of treatment which can be applied with any hope of success must be made use of in the very early stages, Dr. Bayou submitted that only a universal system of segregation is able successfully and promptly to cope with the spread of the disease. The Americans in the Philippines have succeeded by an energetic and consequent segregation of all cases in reducing the new admissions by 90 per cent. In South Africa, where in some colonies, out of financial considerations, only about one-half of the leper population is segregated, the rate of admission has remained constant for the last ten years. Seeing that leprosy is so far-reaching in its social results, and the individual affected is cut off to such an extent from his fellow-beings as to render his earning of a livelihood a precarious matter it is plainly the duty of every Government to prevent its further spread from the standpoint of humanity and also that of sound policy. A systematic and persevering attempt should certainly be made to get rid of leprosy in the British Empire by the institution of settlements for the voluntary segregation of the worst cases, in all parts where the numbers are too great to be dealt with at one time, as in India; and by a system of universal segregation in properly conducted asylums in those colonies and dependencies where relatively small numbers only are to be found. The experience of other countries shows that such a course would lead to a gradual extinction of leprosy.

The Sterilisation of the Fit.

In the old days men fought for the power to do. We now seek for permission to leave undone. It is a day of the pursuit of negative rights. There is a tendency to claim as such a right, the racial power of not being. A great deal of comparative sterilisation goes on amongst us, neomalthusianism, abortion, and the like. Surgery has levelled many of the difficulties that used to be in the way of controlling procreation. A reducible vasotomy gives us an easy, revocable way of sterilising the male which has been satisfactorily tested on what Americans call the unfit. The example is so tempting to our latter-day hedonists that a demand is rising for the operation to be placed, as it were, on the open market. Such a thing we all feel to be ethically and racially unjustifiable, but if once the public comes to demand such surgery, we fear the demand will be met. America, that test-tube of fantastic theories, is arguing about the question already. We hope an answer will be supplied before the problem becomes acute on this side of the Atlantic.

The Use of Smoke Helmets.

A report from the Fire Brigade Committee of the London County Council, submitted to the general meeting thereof this week, shows that science has not been at a standstill with respect to the use of smoke-helmets by firemen. The efficacy of the present type of apparatus has been under consideration for some time, and a recent report by Dr. J. S. Haldane on an examination made by him of the apparatus now employed states that he has formed the opinion that of the two types of self-contained smoke-helmets supplied to the brigade one is not suitable for fire brigade work, while the other, although defective in certain respects, can be altered so as to be satisfactory for brigade purposes. The makers of the apparatus of the latter type have submitted a set of apparatus altered in accordance with Dr. Haldane's suggestions, and satisfactory results have been obtained from the altered apparatus. Dr. Haldane also expresses the view that no man should use a smoke-helmet in circumstances of danger unless he has been thoroughly trained in its use. The committee say that the present arrangements cannot be regarded as meeting this requirement, and they think that it is imperative that steps should be taken without delay to improve the arrangements. They propose that the self-contained helmets shall be withdrawn from the ordinary running appliances and that two motor appliances specially fitted for smoke-helmet work shall be obtained, one to be placed at the chief station of the fire brigade and the other at the Euston fire station. It is proposed that the two appliances shall be manned by specially selected men, who will devote practically their whole time to maintaining the apparatus and training and practising therewith. In addition to carrying self-contained smoke-helmets, they will be fitted with dynamos and portable searchlights, oxygen reviving apparatus, and electric fans for blowing air into places where dense smoke or poisonous gases exist. The scheme also provides for smoke-helmets of a simpler and less expensive type to be kept at 19 stations in different parts of London for use, if thought advisable, pending the arrival of the special appliance. Any scheme whereby the safety of our gallant rescuers from fire is enhanced is deserving of support by the powers that be.

Dermatographia.

THE condition of the skin in which figures and letters can be traced thereupon by stroking with a blunt pencil or the finger nail, commonly known as dermographism, or dermatographia, is familiar to all dermatologists. It is usually regarded as a sign of vaso-motor instability, hence it is pathognomonic of the urticarial state. Cases are not unknown in which a whole word or a design may be written upon the skin in wheals. The phenomenon may last for several minutes, after which it gradually fades. Minor phases of dermographism are frequently seen in children and sometimes in adults with very sensitive skins, but when exaggerated the condition is a favourite one for exhibition purposes—not only at meetings of medical societies. A case of a little French girl affected in this manner has recently been exciting considerable interest in the lay press. She is said to have combined a pronounced dermatographic tendency with manifestations that, to the uninitiated, savoured of the uncanny. The writing that appeared to be supernatural was adroitly produced upon her responsive cuticle by the rapid manipulation of a hairpin—a necessary instrument of feminine toilet that serves all manner of purposes. It sometimes happens that this fictitious form of urticaria is associated with definite hysterical stigmata, though in the present case the patient is said to be normal. Unless the mucous membranes are affected, the condition, though most interesting from a clinical point of view, is not a dangerous one.

The Intra-abdominal Pressure in Pregnancy.

THE comparatively little inconvenience caused by the gradual ascent of the pregnant uterus and the consequent upward displacement of the abdominal viscera is a good illustration of the manner in which the organs of the body adjust themselves to new surroundings. It is conceivable that, in addition to bio-chemical changes set up within the maternal organism, the mere mechanical alterations of pressure within the abdomen, acting reflexly upon the sympathetic nervous, may be responsible for the vomiting of pregnancy, if not for true toxæmia. That the increase of abdominal pressure does cause the latter condition was the contention of Mr. R. H. Paramore, F.R.C.S., in an able paper read at a recent meeting of the Obstetrical and Gynæcological Section of the Royal Society of Medicine. The author carried out a series of fifty-eight observations upon twenty-four pregnant women, whose intra-abdominal pressure was recorded by means of a rubber bag introduced within the rectum and connected with a mercurial manometer, with the patient in various positions. In the case of non-pregnant women with flat abdomen lying at ease in the left lateral position the pressure was only 6 to 8 mm. Hg., whereas in the pregnant the pressure was frequently found to be twice as much and sometimes more than three times. In two cases of toxæmia of pregnancy the pressure registered 18 mm. Hg. in the first, and 22 to 37 mm. in the second. That these increased pressures are due merely to the weight of the enlarged uterus is shown by these experiments to be untenable. Mr. Paramore believes that the increased intra-abdominal pressure is due rather to the tonic contraction and actual hypertrophy of the muscles of the abdominal wall. The compression of the viscera beneath affects the blood-flow through their capillaries, so that disturbed vascular conditions may play a part in the production of some of the morbid symptoms of the pregnant state. The high pressures recorded occur usually about the middle period of gestation before any yielding of the previously stretched muscle takes place. Many of our present conceptions regarding the pathology of the pregnant state may need to be re-adjusted in the light of recent research.

The Treatment of Neurasthenia.

THE essentially modern malady known as neurasthenia is often exceedingly trying for the medical practitioner to treat. In the first place, the diagnosis of the condition requires to be most carefully established, lest there be overlooked any possible organic disease of the nervous or other system of the body. The causes which lead to the gradual appearance of the neurasthenic state are numerous, and it is only by carefully training these that the patient may be placed in the right way by the removal of the exciting factors. Of the many types of the affection commonly met with in practice, Dr. J. S. Risien Russell, speaking upon the subject before the Medical Society of London the other day, stated that it is most convenient to group them into cerebral, spinal, cerebro-spinal, and psychical. Many patients suffering from neurasthenia believe that their particular case is something quite unique, and that no one has ever had their symptoms before. Such cases often try the skill and patience of the medical man to the utmost, but if he wishes to retain the confidence of his patient and to be successful in the treatment he must be careful to conceal all impatience, and, above all, he must act as though the case were unique. If a rest-cure be chosen for a neurasthenic patient it should be seen that this mode of treatment is free from every possible distraction and is really what its name implies. In some cases the use of suggestion will be more successful, dependent, of course, upon the skill of the operator and the combination of symptoms present. Dr. Risien Russell stated that the use of spermin, either alone or in combination with other internal glandular extracts, is sometimes successful alone, especially in cases of the sexual type. The use of drugs is comparatively limited, though strychnine, bromides, iron, arsenic, lecithin, phytin, and the glycerophosphates, have their place in the treatment of neurasthenia. Finally, when a patient returns to ordinary life after undergoing a rest-cure, the change must not be too abrupt, and everything likely to produce fatigue must be carefully avoided.

The Housing Inquiry in Dublin.

The Departmental Committee appointed by Mr. Berrill to inquire into housing conditions in Dublin has been sitting to receive evidence during the past week. Up to the time of writing, most of the witnesses examined have been officials of the Dublin Corporation, who have been able to furnish facts of great importance. According to Sir Charles Cameron, Medical Officer of Health for the city, the "by-laws regarding over-crowding had not been strictly carried out," and could not be without an increase of his staff. Since 1890 the Corporation has had Parliamentary power to regulate the number of persons living in tenements. Each resident must have a minimum of 320 cubic feet of space. Up to the present no register of tenement rooms giving the cubic space in each is available, though one is in preparation. Inspectors visit the houses for over-crowding every six or eight weeks, carrying measuring tapes to estimate the cubic space. The population of these residences is, however, a floating one, and, as Sir Charles Cameron admitted, the number of residents to-day is no guide to what it may be next week. As regards sanitary accommodation, Sir Charles Cameron thinks that about one-half the tenement houses have sufficient. About 2,000 of the 5,712 tenement houses require to be re-built. We do not propose to comment on the evidence at this stage. It is abundantly clear, however, that some tribunal more independent and representative than a Committee of the Local Government Board is required to conduct an inquiry into the question. In saying this we add that we believe that Mr. O'Conor and his colleagues on the Committee are making an able and honest effort to obtain a knowledge of the facts. The Local Government Board is, however, next to the Dublin Corporation, the body responsible to public opinion for the present state of affairs.

The Health of the Indian Army.

The Blue-book recently issued regarding the health of the Army in India shows that the improvement begotten of Lord Kitchener's sanitary measures has been well maintained. It is indeed significant that the change for the better in this respect only dates from 1902, when Lord Kitchener assumed the command in that country. His hardening marching schemes, no less than his sanitary enactments, deserve credit for this. Anti-enteric inoculation has maintained its satisfactory results, even though its fallibility is once again demonstrated, for the ratio per 1,000 of hospital admissions for enteric among the inoculated (who now number 85 per cent. of the European troops) was 1.7, and the ratio of deaths 0.17. Among the non-inoculated the rates proved much higher; yet the fact that in spite of all experiments inoculation is so clearly not infallible may be regarded by some as a justifiable extenuation of the troops who still refuse to submit to the operation. Moreover, it must always be remembered that a goodly proportion of the refractory 15 per cent. are men who have either already had enteric fever or who have approached the evening of their Army career without having contracted it, and see no good reason for being inoculated just as they are about to return to civilian life. The point is, of course, that compulsory inoculation, like compulsory vaccination, tends to lessen the case-incidence of typhoid fever, as well as to render the disease far milder in its attacks. Past experience has shown the fearful ravages made by enteric fever amongst troops on active service, and any measure that minimises such a risk to the soldier should be welcomed rather than discouraged.

PERSONAL.

Dr. Colston Wintle has been re-elected Chairman of the Bristol Health Committee.

Dr. John Playfair has been elected President of the Edinburgh Medico-Chirurgical Society for the ensuing year.

Dr. H. W. Barber has been appointed Physician to the Skin Department at the Evelina Hospital for Sick Children Southwark.

Dr. F. C. Linton, Deputy Medical Officer of Health for Croydon, has been appointed Medical Officer of Health for Tunbridge Wells.

Dr. Herbert E. Cuff, M.D.Lond., F.R.C.S., has been appointed Principal Medical Officer to the Metropolitan Asylums Board.

Mr. G. Grey Turner, M.S.Durh., F.R.C.S.Eng., has been appointed Lecturer in Surgery in the University of Durham College of Medicine, Newcastle-on-Tyne.

A handsome memorial tablet to the late Mr. J. H. Targett was unveiled the other day in All Souls' Church, Langham Place, W., by Mr. Charters Symonds.

Mr. L. E. Barrington-Ward, Ch.M.Edin., F.R.C.S. Eng. and Edin., has been appointed Surgeon to Out-Patients at the Hospital for Sick Children, Great Ormond Street.

A memorial to the late Dr. R. Arthur Prichard, who on several occasions had been Mayor of Conway, in the shape of a stained glass window in the old parish church of Conway, was unveiled the other day by the Dean of Bangor.

Dr. W. S. Kerr, of Sheffield, was the recipient the other day of a suitable presentation upon the occasion of his retirement from the post of Hon. Secretary of the Sheffield Medico-Chirurgical Society, which he has held for many years.

The medical men of Swansea have signalled the retirement of Dr. Nelson Jones and Mr. Brook from the local hospital staff after 20 years' honorary service, and their appointment, under the rules, to the consulting staff, by entertaining them at a complimentary banquet.

Dr. and Mrs. J. Kennish, of Clapham, were the recipients of a handsome testimonial the other day from fifty professional colleagues in appreciation of their valuable services in relation to the Provisional Medical Committee for the Wandsworth Division of the British Medical Association during 1911-12.

CLINICAL LECTURE
ON
POST-INFLUENZAL NEUROSES AND PSYCHOSES. (*a*)

By SIR GEORGE H. SAVAGE, M.D., F.R.C.P.Lond.,

Consulting Physician for and Lecturer on Mental Diseases, Guy's Hospital, London; Consulting Physician to Earlswood Asylum.

INFLUENZA has recurred at irregular intervals, and it is reported that in 1580, after or with the epidemic, hysteria and other functional nervous disorders were noticed; more recently, in the eighteenth century, similar association was noticed, and in 1836 there was an epidemic on which Sir Henry Holland reported, noticing the occurrence of nervous symptoms. Dr. Crichton Browne recorded cases of insanity in 1874. In 1891, we had a severe recurrence of influenza in England, and for a time there was doubt as to its having any influence in the production of insanity. In fact, I was one of the first to point out that a good many of the patients who were being received into Bethlem Hospital had suffered from the disease. Then arose a rather feeble discussion as to whether there was anything like a true post-influenzal insanity; we had not got beyond the narrow view of special forms of disease following particular influences. It has taken a long time to get it understood that the nervous system has only a limited number of ways of expressing itself, and that it does this whether the organ is being destroyed or is only interfered with. It was thought that the sane suffered more than the insane, and here was a very pretty mistake. It was found that the nurses at an asylum suffered more from the epidemic than did the patients, the explanation being simple. The nurses went out and about and were exposed to contagion, whereas the patients were only very slightly exposed; anyway, this seemed to prove that the malady was contagious. It is now fully recognised that it is due to some—at present unknown—toxic agent and that it is contagious.

In considering the affections of the nervous system which are associated with the disease, we shall have first to note that in many respects they are like the disorders which are met with after other febrile disorders, but that as in most of these there are specific differences which are noteworthy. I have no doubt that the neuroses following influenza occur most commonly in those who are weakened along nervous lines, in one way or another, hereditary predisposition was very common and still more potent was the fact that the patient had had some previous nervous or mental troubles. I have no doubt, too, that alcoholics suffered more than the temperate. I could not say that in my experience mental symptoms occurred more frequently in one sex than in another; I met with neuroses at all ages. It was interesting to find that certain cases of general paralysis seemed to start with the influenza. In all these cases the disease was latent, but all were predisposed to the degeneration through syphilis or alcohol or both. In the earlier days one had not the opportunity of verifying the syphilitic connection with general paralysis of the insane which we have now, and we had to accept the history which was given though often we had our doubts about its truthfulness. My own opinion is that influenza alone without syphilis would not produce general paralysis of the insane.

In the earlier epidemics the simpler functional neuroses were recorded, but little or no notice was given as to the graver ones. I do not suppose there were no psychoses then, nor do I believe there were any very marked differences in the epidemics then and now. It is noteworthy, however, that the former ones seemed to depart altogether for a generation or more leaving no aftermath, but we have never been free from the plague since 1891, and though it has been at times less in evidence I believe it has left behind a something which has crystallised itself into the name of "influenzal" colds. The earlier noticed symptoms were functional, hysteria and hypochondriasis being more prominent; later the forms of neuralgia and neuritis were recorded.

I shall now proceed to give my own experience. First, then, I would say there is no specific form of mental disorder which deserves the name of influenzal insanity. The nervous and mental symptoms may occur with the onset of the affection during the acute or febrile stage, or may follow at a longer or shorter interval as sequelæ.

Among the more simple neuroses I have met with a host of slight symptoms, each epidemic having some peculiar character. Thus in one I met with gastric disorders; in another the throat was chiefly complained of; while in another a large number of patients were said to be suffering from neuritis. I, personally, have never had a severe attack of influenza, but I may say that I have sampled all the minor troubles. I shall never forget the neuralgia which was present in one illness. This was of the following type: Suddenly I felt a sensation of heat over one side of my face and head, this was soon replaced by agonising neuralgia which for an hour or more almost drove me to distraction, then as suddenly as the attack came on, it left completely, only to return in several hours; thus about three times in the twenty-four hours I had these neuralgic attacks. I found phenacetin the best remedy, though I thought alcohol was of some service. Another form which I have not seen described was a renal affection, the headache and eyeache being followed by most marked polyuria and with this the attack passed off. I shall not spend more time in referring to these slight neuroses beyond saying that during an influenzal epidemic many other disorders seem to be affected by it, and in treating them it is well to remember this. I think I must here refer to one of the symptoms which may occur early in the disease but which

---

(*a*) Lecture delivered at the London Post-Graduate College, November 19th, 1913.

is not often recognised till the acute stage has passed and therefore is generally looked upon as a sequela. This is loss of smell. I have met with a very large number of patients thus suffering, and I find that if recovery take place it is very slow. Deafness is common during the attack and may persist, but once I met with a patient in whom the influenza seemed to improve the hearing. I had to see an old man who was suffering from acute mental disorder, and it was important that some one should during his illness have power to conduct important business. It was decided to get a temporary order for administration of his affairs, and for this purpose I had to see and examine him. I was told he was very deaf, and this I found was true; I had to shout to get him to understand me; later with the influenza his hearing improved so much that he understood when I spoke in my ordinary tone.

I have not myself met with cases in which affection of sight of a temporary nature was associated with influenza, but I believe this has been noticed.

As I have already said, I look upon hereditary predisposition as a most important point in considering the forms of mental disorder associated with influenza. Whereas delirious states and mania of a delirious type may follow the affection in healthy patients, where there is family neurosis the tendency seems to me to be the development of the more organised forms of insanity. In these cases hallucinations of the senses, specially of hearing, occur. It is noteworthy that a previous attack of mental disorder may take the place of inherited tendency. Patients who have had previous attacks of mental disorder frequently break down again when they have influenza.

Next I have no doubt that persons who had injured their general health by alcoholic excess are more likely to have mental disorder after influenza than are the more temperate; the tendency, in my experience, in these cases, is for the disorder to assume an acute delirious type, so that I have seen a certain number of cases in which it was difficult to decide whether they were suffering from delirium tremens or delirious mania; I think probably the temperature might help in the diagnosis, but I only throw this out as a suggestion, as I have no facts to go upon.

Next I would refer to cases in which there may be some other toxic infection or cause of infection. I saw a good many cases of puerperal insanity associated with influenza, and dreaded these cases as they assumed in most instances the delirious and dangerous type.

Though I shall have later to refer specially to the connection between general paralysis of the insane and influenza, I must complete this part of my subject by saying that I have met a good many cases of general paralysis of the insane in which influenza was given as the cause of the disease, and I was able distinctly to trace the outbreak of the acute symptoms to the toxic cause of influenza associated with the specific cause.

Neurasthenia, one of the most marked after-effects of influenza, is the profound nervous exhaustion which seems to be out of all relationship to the febrile disorder which has been present. When all the acute symptoms have passed the patient who feels recovered attempts to return to his work or else goes into the country with the idea that a slight change will complete his restoration. In the latter case he is disappointed to find that a single round of golf or a fairly long walk leaves him prostrate, but without any feeling of pain. He hopes that what he looks upon as the stiffness or weakness due to want of exercise will pass, but instead of this he finds himself more and more exhausted with exercise. Similarly, the patient returning to his professional work or business starts hopefully, and for a time he is all right, only feeling the intellectual work tires him unduly. In a few cases I have met with patients whose return to work was associated with almost unnatural buoyancy and feeling of capacity; this soon passed, leaving depression and exhaustion. These cases are typically neurasthenic and require very careful and prolonged treatment. I have seen several doctors who have returned to work too early, and after several relapses have had to take rest-holidays lasting for several months; such holidays are best taken by the seaside, and I believe sea voyages are the best of all. Here, again, I believe a moderate amount of good wine is of service.

But now to return to the more special mental disorders associated with influenza. As I have already said, these may occur with the onset, and in such cases they may seem to bear some relationship to the febrile symptoms. I have seen some of the most acute cases of acute delirious mania, which have been looked upon as cases of meningitis or cerebritis, following within a few days of the onset of the influenza. These cases may have no other apparent cause, but I have described cases in which some contributing cause, such as pregnancy or parturition, has had a share in their causation. In one case acute syphilitic fever was connected with an acute attack of mania. Acute delirious mania when uncomplicated rarely has any marked rise in temperature, but in the cases associated with influenza this does not hold good. The symptoms of this disease may be briefly given. Headache, eyeache, followed with great restlessness, in which there is very active and agitated sleeplessness. The patient soon develops hallucinations of sight and hearing; food is often refused. The almost uncontrollable restlessness leads often to difficulty in keeping the patient in bed. The tongue becomes dry, and inattention to the calls of nature may follow. The temperature may be only a few degrees above normal, but with influenzal cases I have known it rise to 105° or 106°. This state may last for some weeks; it almost always requires asylum treatment. It ends fatally in at least one-third of the cases; in one-third complete recovery will probably take place; but of the other third some become mental cripples for the rest of their lives, while some are subject to recurring attacks of mental disorder. Personally, I believe in abundant feeding and the use of alcoholic stimulants.

Nearly allied to the above are the cases of acute confusional mental disorder; there is less excitement, no rise in temperature, but a general mental confusion often with visual or auditory hallucinations. These, like the last, have in my experience occurred chiefly in young persons. The confusional cases are hopeful in prognosis, though I must say that in post-influenzal cases the progress is often very slow towards health. There is a great danger of relapse, and as I have said you have to encourage with hope for long periods. In patients who are neurotic by heredity, an attack of influenza may either accentuate a tendency or establish a morbid habit. Thus I have known young men and women who have always been looked upon as shy and introspective, or who have been highly conscientious, who, after an attack of influenza, have slowly developed paranoiac symptoms. In these cases the prognosis is not good, but when the cause has been influenza I do not give up hope for long periods. A much more grave condition is that in which young people, belonging to insane families, at or about adolescence, break down with some form of emotional mental disorder. In these, hysterical outbreaks or the development of immoral tendencies may follow an attack of influenza. Such cases not infrequently turn out to be cases of dementia præcox.

The relationship between influenza and general paralysis of the insane is very interesting. First I do not believe that general paralysis of the insane ever arose from simple influenza. But I have seen examples of general paralysis of the insane which have followed directly on an attack of that disease. In some cases after the confirmation of the diagnosis of general paralysis of the insane, the friends admit that the patient had been changing slowly for some months before the mental breakdown. In some there was the very characteristic sleepiness; in others, change of habits in some small and immaterial way. An attack of influenza follows. This may be of only a very slight kind; in fact, I have met with cases in which the patient was said to have only had a slight influenzal cold, but whether the illness has been slight or severe soon after it has passed the friends notice the physical signs of general paralysis of the insane, the change of expression, the alteration in speech and gait. Though in these cases the tendency is to follow the ordinary course of decay, I have rarely come across cases in which there was much general exaltation of ideas or very marked irregularity of conduct. More generally they pass rather rapidly into dementia. I have no statistics as to the occurrence of fits or of the duration of the disease. In these cases, again, I think asylum care is the best for them and for their relations.

I have so far referred only to the disorders which follow influenza occurring in normal persons, though I have said that I have met with cases in which the recurrence depended on influenza in cases of returning mental disorder and in cases in which there have been previous symptoms of a neurotic kind. I have seen recurrence of fits in patients who have had fits before. I have seen temporary relief from migraine and from spasmodic and hay asthma following an attack of influenza, and even slight apparent mental gain in some cases of chronic insanity, but all these have been very temporary.

There is a branch of the subject which I have not hitherto written about; this is what may be called the ethical and the medico-legal sides. You all know the dread of the term "insanity," and the dislike to the word "asylum." To take the latter first I always make a point of treating acute influenzal cases out of asylums if possible, for they are so eminently curable that one wishes for the sake of the relations to avoid the stigma of "asylum." Next, I have had innumerable inquiries from patients who have had attacks of mental disorder following influenza as to whether they were really "insane." I admit the great difficulty in being quite honest, yet doing what is for the best interest of the patient. "Mental breakdown" is a very useful term, and I have found that the patient has derived comfort when she has been told that she had "meningitis." I would never withhold from the patient, on his request, as to whether he had been really out of his mind the fact that for a time in my opinion he was not himself. If you go further you will often find yourself landed in a very awkward position. The patient may resent the fact that he has ever been certified and may look upon his own doctor as having done a very wrong thing in certifying him. You know that certification of anyone in the Army practically removes him for ever from the Service, and I have seen some very hard cases in which young officers after an attack of influenza have been certified though their mental disorder has been transient and they have been removed from the Service.

Another example of the medico-legal aspect of post-influenzal neurosis is that of a young Naval lieutenant who, after an attack of influenza, lost his aptitude and being navigating officer managed to run his ship aground in a fog. He had got into a state of nervous weakness and failed to recognise the lights. He was transferred to another ship, but here again he got into a muddle when directing the course of the ship, had to be removed from the bridge, and passed into a more active state of mental disorder which passed off only after prolonged rest.

I sum up, as I did on a previous occasion, with an adaptation from the work of Dr. Leledy, of Bourges. Influenza, like other febrile disorders, may set up psychopathy. Mental disorder may follow at any stage of the influenza. Influenza in the production of disorder may be associated with other causes. It may be the predisposing or the exciting cause. In all cases there is some acquired or inherited predisposition to neurosis. The mental and nervous symptoms depend probably on true brain changes due to some toxic influence.

The nervous symptoms may be sudden and need bear no relationship to the severity of the influenza.

The curability depends on general rather than special ("influenza") condition. Dr. Leledy thought the insane less liable to the disease than others; I have my doubts about this.

In a few cases neuroses were relieved by the influenza. Thus there may be temporary remission during the acute stage of influenza. No special line of treatment can be indicated. There may be medico-legal aspects to the disorders following influenza.

The above put plainly are my own experiences.

I must not omit to notice the large number of persons who, having had attacks of influenza, never recover completely. I have described such patients as mental cripples, and I know no better term to describe them. They are changed in some way, often to so slight an extent that all that the relations can say is that they are not themselves.

I have met social and marital incompatabilities arise as a consequence, and in others I have known defective higher control so that the person no longer has a truly moral sense.

I have known persons who were good in some special art after influenza cease to be able to make a living, yet quite unable to appreciate their own defect.

Such cases I look upon as hopeless. They are too old for re-education, and have to be placed with the feeble-minded.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by J. M. Munro-Kerr, Muirhead Professor of Obstetrics and Gynæcology, Glasgow University; Gynæcological Surgeon, Royal Infirmary, Glasgow; Obstetric Physician, Glasgow Maternity and Women's Hospital; Hon. Fellow American Gynæcological Society. Subject: "Extrauterine Pregnancy."*

ORIGINAL PAPERS.

ON NEPHROPEXY.

By J. LACY FIRTH, M.D., M.S.Lond., F.R.C.S.,
Surgeon to the Bristol General Hospital.

My object in this communication is a double one—to express appreciation of the operative *technique* in nephropexy recommended by William Billington, and at the same time to emphasise the fact that in the operation great caution has to be taken to avoid wounding the pleura. I also record a case in which this accident occurred in my practice (*a*).

It was in Nov. 1910, that I decided to try the method of Billington for fixing a movable kidney. For several years previously, following Jonathan Hutchinson, jun., I had been fixing kidneys with kangaroo tendon sutures passed through the organ and through the muscular edges of the wound on each side. Earlier still I had practised the method of Edebohls, in which the renal capsule is deflected from both the anterior and posterior surfaces of the kidney halfway to the hilum, and the deflected portion of the capsule and the undeflected part near by are transfixed with fixation or suspension sutures, the ends of which are carried through the muscles on each side of the wound. My reason for changing from Edebohl's method to Hutchinson's was the feeling that it was a mistake to decapsulate the kidney, because decapsulation seemed unnecessary, and perhaps caused some atrophy of the renal cortex. It appears to me to-day that partial or even complete decapsulation of the kidney is a procedure which leads to no appreciable evil results, and that it is the one procedure which most certainly secures firm adhesion between the kidney and surrounding structures. In this connection I may allude to the experiments on cats made by Harold W. Wilson and C. M. Hinds Howell. These writers, comparing the results of suturing without decapsulation and suturing after partial decapsulation, say, "We can confidently assert that that of decapsulation secures by far the more efficient fixation."

My reason for passing to Billington's method after using the others described was that by it the kidney is fixed at a normal level, whereas in the other two the kidney is fixed at a level considerably lower than normal.

Writers have alleged that no harm results from fixing the kidney in a lower position than normal, if the fixation holds good. Others have reported troubles which seemed to be due to the low position in which the organ had been fixed. One of my patients in whom I had fixed the kidney rather low, after an interval of six months of relief, began to complain of pain in the corresponding lumbar region of the abdomen, and she continued to complain for eighteen months or more. At last, in desperation, I determined to try and refix the kidney at a higher level. I found, however, that the kidney was so firmly adherent that it was impossible to improve its position, and I had to give up the attempt. I cannot be at all certain that this patient's pain was due to the low position of the kidney. She is a person never without pain somewhere. Before her kidney had been touched she had had a more or less normal appendix removed for pain simulating appendicitis.

The above is the only example I remember seeing of trouble due, or probably due, to fixation of the kidney in too low a position. Billington after quoting with approval Goelet's statements that "fixation of the kidney lower than normal is worse than mobility," and that "this is what produces the great percentage of failures," states that he himself has several times had to operate upon kidneys previously fixed too low, and which were causing severe pain.

Anatomical considerations suggest that a fixation of the kidney in a low position may result in kinking the ureter, and cases of hydronephrosis following renal fixation have been attributed to this state of affairs.

On the other hand, some writers have recommended fixing the kidney lower than usual to avoid the exertion of pressure upon it by the liver, specially during inspiration, which pressure tends to displace the organ again, or to flex its upper pole. Fixation of the kidney to the last rib has been particularly objected to, because the normal movement of the last rib is upwards with inspiration. The kidney should move slightly downwards with inspiration to avoid diaphragmatic pressure.

My first impressions on reading Billington's description of the operation he uses were that the method was condemned by its meddlesomeness and complexity. But I have found it easy to perform, and not so complicated as its description might lead one to suppose.

For anything like a complete description of the operation here labelled Billington's I must refer the reader to that surgeon's original writings. He lays no "claim to originality in connection with any particular step in the operation." Methods and principles suggested by Edebohls, Fullerton, Goelet and Brödel have been combined in the operation, and the combination of methods adopted seems to have been first used by Jordan Lloyd.

Briefly outlined, the following are the steps of the operation: (1) Oblique incision, beginning over the eleventh intercostal space; (2) separation of the fat and perinephric fascia "from the muscles of the back for some distance above and below the last rib"; (3) dislocation of the kidney into the loin, and separation of all adhesions and fat; (4) deflection of a flap of renal capsule downwards from the upper half of the kidney, two-thirds of the flap being from the posterior surface, one-third from the anterior; (5) insertion of two supporting sub-capsular sutures, after the manner of Goelet and Brödel, into the lower half of the kidney, the ends of these being long to pass through the muscles and skin above the wound to be tied over gauze rolls; (6) passing a curved Spencer Wells forceps through the eleventh intercostal space at the edge of the erector spinæ muscle so that the ends of the forceps curve

---

(*a*) *Bristol Medico-Chirurgical Journal*, September, 1913.

round the last rib and project below into the upper part of the wound; and (7) passing the capsular flap, grasped in the forceps mentioned, over the last rib and suturing the portion drawn out down to the capsular surface of the kidney at the lower border of the rib.

Billington's assertion that, by the method of operating outlined above, the kidney can be fixed in a normal position is based upon investigations made by him in conjunction with Professor Arthur Robinson. He writes: "Dissections of formalin-hardened bodies were made. It was found, with great constancy, that in the normally-placed kidney the angle formed by the last rib and the outer edge of the erector spinæ corresponds to a point on the posterior surface of the kidney midway between the upper and lower poles, and about half-way between the hilum and convex border." This middle point of the posterior surface of the movable kidney can be brought almost exactly to the other corresponding point, that is to the angle of the last rib and erector spinæ, by the operation described. The capsular flap in the operation, as pointed out above, is detached downwards only to the level of a line midway between the upper and lower poles of the kidney. In other words, the flap remains attached to the kidney by its base-line at this level, and the base-line is brought into contact with the last rib, covered by the diaphragm, when the flap is drawn taut over the rib. The kidney need not be placed so high. If the liver has a lower position than normal, and encroaches upon the space which is ordinarily filled by the upper pole of the kidney, it will be wiser to fix the kidney in a position a little lower to avoid downward pressure.

The most serious drawback of the Billington operation, to my mind, is the danger it entails of wounding the pleura when a channel is being made over and beneath the last rib. I have performed the operation ten times. On each occasion, when taking this step in the operation, I have been afraid that I might hear that unpleasant hissing sound which is made when air enters the pleural cavity with inspiration through a wounded pleura. At the sixth operation I had the mortification of hearing that sound. I give further details and the subsequent history of the case below. Such an occurrence immediately suggests the question whether this step in the operation is worth taking or not. The uppermost suspensory Brödel suture brings the base-line of the flap and the kidney to the proper level, and retains them there for three weeks. Is not that sufficient? If not, the fixing power of the flap then comes into play, for the suspensory silk-gut sutures are removed. For the first three weeks I consider the capsular flap to be almost useless.

On the subject of the relations of the pleura to the seat of operation and the danger of wounding it Billington makes the following remarks: "Usually the pleura does not extend below the lower border of the last rib, and for one and a-half inches from the tip it terminates at or above the upper border. In some cases, however, the pleura extends lower." And again: "The only precautions necessary are to use a blunt instrument, to keep close to the rib, and to make the puncture not more than one and a-half inches behind the tip. I have executed this manœuvre upwards of 350 times, and have only opened the pleura once."

Before my sixth operation the above statements gave me considerable confidence in my ability to avoid wounding the pleura, but since the accident hope has had to replace confidence. My hope for the future is the greater because the instrument I used for clearing a space around the rib was not sufficiently blunt. I was not in possession of a curved Spencer Wells forceps, the instrument recommended by Billington, so I used an aneurysm needle. It is quite likely I should have safeguarded the pleura if I had used blunt forceps.

There are, however, facts which show that the pleura is liable to puncture in any operation for exposure of the kidney by the lumbar route if the deeper part of the incision at its upper end is carried to or nearly to the lower border of the last rib, or to the rib which is supposed to be the last one. Thus in Jacobson and Rowlands's "Operative Surgery," a case is mentioned in which the accident occurred because the last rib was rudimentary, and the pleura came down well below the eleventh rib. The moral to be drawn from that case is that the ribs should be counted from above. Also Lange is quoted as having shown that in exceptional cases the pleura may descend considerably below a normally developed last rib. I have myself seen the pleura opened in exposing the kidney apparently because the pleura descended below the last rib.

The case I report below appears to me worth recording, not only as a warning of the danger under discussion, but also because it illustrates the possible effects of the accident. It will be noticed that dyspnœa gradually increased for two days, but was not noticeable for several hours after conclusion of the operation. These facts suggest that air continued to enter the pleura for many hours. How that could happen is difficult to understand. There was a drainage tube, a small one, in the lower part of the wound, but this was some inches below the last rib, and the kidney lay vertically between the tube and pleural wound, and of course there was a large dressing over the wound.

The following are notes of the case:—

Miss L., æt. 23, had a very mobile right kidney, and suffered much from dyspeptic symptoms. A gastric ulcer had been suspected to exist. On October 31st, 1912, the kidney was exposed, brought out on to the loin and all adhesions separated. The capsule was deflected from the upper half of the kidney in the way described above. The last rib was then cleared at the border of the erector spinæ, an aneurysm needle being the instrument used for the purpose. As the needle end appeared in the upper part of the wound at the lower border of the last rib air began to enter the pleura. Mops were immediately applied to the spot to prevent further entry of air, and it was decided to cut away the capsular flap and trust entirely to the two supporting silkworm-gut sutures to retain the kidney in place. The lower half of the kidney was smeared with pure carbolic acid. As soon as the kidney was drawn up into position by the sutures all suction of air into the pleura seemed to cease. No effects from the air entry could be detected either by the anæsthetist or by me, and my impression was that very little air had entered the pleura. A small drainage tube was placed below the kidney, and the wound closed in layers. I saw the patient again six or seven hours after operation. She was in some pain, but appeared to have no respiratory trouble. At the end of twenty-four hours, on November 1st, she complained of some difficulty in breathing, and there were the physical signs of a pneumo-thorax over the front of the right chest, and the heart's apex beat was about an inch outside the nipple line on the left.

November 2nd (forty-eight hours after operation).—Difficulty in breathing more marked, respirations rapid, patient rather dusky in appearance, resonance on percussion from the right chest across the middle line to slightly beyond the left edge of the sternum in the cardiac region. The apex beat was still further displaced to the left.

An aspirator needle was therefore passed into the chest on the right side through the seventh intercostal space near the posterior axillary line, and connected with the vacuum made in a Winchester quart bottle. Air immediately passed into the bottle from the chest. At the same moment the patient began to have a series of short coughs, rapidly repeated, and she became more dusky and distressed. The vacuum was shut off, and after a pause of half a minute or a minute the cough ceased, and the communication with the bottle was re-established. More air came from the chest and more coughing occurred, but not so much as before. The vacuum was again shut off, and after a pause again connected with the chest, and then the needle withdrawn, as no more air seemed to be obtainable from the pleural cavity. The signs of pneumo-thorax could not now be elicited, and the apex beat had come back at least an inch nearer its normal position. The patient would not confess that her breathing was easier for another ten minutes. At that time there was no doubt possible but that she was considerably relieved of her respiratory distress. From this time onwards the course of convalescence was normal.

In conclusion, let me say that so far as I can judge on theoretical grounds, and as a result of a very limited practical experience, Billington's operation for movable kidney is a very good one, perhaps the best yet described.

NOTES ON
FIFTY CASES OF NASAL DISCHARGE TREATED WITH VACCINES. (a)

By A. LOGAN TURNER, M.D., F.R.C.S.E.,
Surgeon, Ear and Throat Department, Royal Infirmary, Edinburgh,
AND
N. HAY BOLTON, M.B., Ch.B.,
Late Clinical Assistant, Ear and Throat Department.

The following fifty cases underwent one or more courses of treatment by vaccines. None of them have been specially selected with a view to publication here, but they form a continuous series. In some instances the condition had failed to respond favourably to other methods of treatment, while in others again, vaccines were used at the outset. In every case an autogenous vaccine was prepared. The opsonic index was not ascertained in any instance. As a rule, the injection was given once each week, and the treatment was carried out over a period of six to eight weeks, sometimes longer. If employed for a longer period than this, a second swab was taken from the nose and a fresh vaccine made from the organisms then found. The first dose was, as a rule, a small one, the second was double the first, and the third double the second, and so on.

The fifty cases treated in this way were grouped as follows:

1. *Cases of nasal catarrh*, eighteen in number; these included (*a*) eleven cases of chronic muco-purulent catarrh with or without some degree of nasal obstruction, also (*b*) seven cases of frequently recurring colds in the head.
2. *Cases of chronic purulent rhinitis*, nine in number; in a few of these slight crusting and commencing atrophy were noticeable.
3. *Cases of fœtid atrophic rhinitis* (*ozæna*), eighteen in number.
4. *Cases of accessory sinus suppuration*, five in number. In this group, with one exception, the vaccine was used only after operation as an adjunct in the after-treatment.

1. *Nasal catarrh.*—In the sub-group (*a*), eleven cases, we had to deal with the class of case in which there was a more or less persistent muco-purulent nasal secretion lasting in some cases for months, but in others for a number of years. Inferior turbinal engorgement caused a varying degree of nasal obstruction. In four of the cases there was an associated sycosis of the upper lip. Accessory sinus suppuration was excluded.

In the eleven cases comprising this sub-group, previous treatment had been carried out in nine, while in two, vaccines were employed at the outset. The treatment referred to consisted mainly in nasal douching; in three cases the galvano-cautery had been used and in one a partial turbinectomy had been performed. Because this treatment, however, failed to give the patients the desired relief vaccines were commenced. The organisms found in the nasal cavities in these cases were for the most part varieties of the staphylococcus pyogenes, also the pneumococcus, the streptococcus and the Bac. tetragenus. The results in this class of case were uniformly good. After an average of eight injections, the patients without exception expressed themselves as feeling better. Fewer handkerchiefs were used. The discharge disappeared or was greatly diminished in amount. In the four cases in which there was a secondary eruption upon the upper lip, this disappeared. In three of the cases a second vaccine was found necessary, some months after the first had been discontinued, because of recurrence of the symptoms. It is possible that some of the other cases may require further vaccine treatment, but at the present time they have not applied for it.

As an example of this class of case, we may quote the following: Female, chronic nasal catarrh with exacerbations and considerable nasal obstruction for some years. A mixed vaccine of the pneumococcus and streptococcus pyogenes was commenced. After four injections, she was breathing more freely, and after eight she felt very well and had no trouble with her breathing. An intercurrent cold was not so severe as had been the case before treatment was commenced. Six months after the twelfth and last injection, there had been no recurrence of symptoms.

In the sub-group (*b*) there were seven patients who complained of frequently recurrent acute

---

(*a*) Paper read before the Section of Rhino-Laryngology, at the International Medical Congress in London, August, 1913.

colds in the head. In two of the cases there was always very considerable elevation of temperature associated with the onset of the rhinitis. Sprays, douches, and even cautery treatment had been previously employed in some of them. The staphylococcus aureus and albus were the organisms most frequently met with, but the pneumococcus was also found. The vaccine was made from the nasal discharge at the time of an acute attack. There is no doubt that in these cases the acute attacks occurred with much less frequency and their severity was diminished. In four of the patients a second course of vaccines was carried out on account of recurrence of the acute catarrhal symptoms. As regards the three other patients in this sub-group, we have no notes regarding their further history. It is probable that in this class of case occasional courses of vaccine may be necessary.

2. *Nine cases of purulent rhinitis* with a tendency in some to a slight degree of crusting and atrophy. In this group of cases we had to deal with a condition of the nasal cavities which is generally recognised as the early stage or predisposing cause of atrophic rhinitis. The cases treated may be divided into two classes, (i.) three in which no improvement appeared to follow the injections. The organisms were the staphylococcus aureus and albus and a gram-bacillus in two of them. Nasal douching for a considerable period had failed to give relief. A course of vaccines for six weeks did not seem to improve the conditions. (ii.) In the six remaining cases, however, distinct improvement was soon observed and in five a cure may be said to have resulted; in one case, indeed, a year after the treatment, no nasal discharge could be detected. The staphylococcus aureus was present in the discharge in four cases, being in pure culture in two and combined with a short streptococcus in one and a gram-bacillus in another. The pneumococcus was present in pure culture in another case. Where more than one organism was present a mixed vaccine was given. Nasal douching had been previously tried in these cases without success.

3. *Eighteen cases of fœtid atrophic rhinitis* (*ozæna*).—In the light of the collective investigation into the nature of ozæna, the use of vaccines in this group of cases was of special interest. All the cases were characterised by crusting and some degree of atrophy of the mucous membrane; the fœtid character of the discharge was not recognisable in every instance, possibly on account of the syringing treatment that was being adopted, but there was no doubt as to the exact nature of these cases. In all of them nasal douching with or without preliminary plugging of the anterior nares had been carried out for varying periods of time from a few months to several years. A certain degree of benefit naturally accompanied the douching, but relapse took place on cessation of treatment.

The cases may be divided into two groups according to the results obtained by the use of vaccines: (i) in eight cases, no benefit appeared to be derived from the injections; (ii) while in ten others, more or less distinct improvement followed their use. It is necessary to analyse the two groups more carefully.

(i) Of the eight cases not benefited, the Bac. mucosus ozænæ (Abel) was cultivated and used in the vaccine in six, in pure culture in three, and associated with a staphylococcus in two, the Bac. proteus in one, and the Bac. pyocyaneus in one. In the remaining two cases mixed staphylococcal forms alone were procured. In these cases the maximum number of injections was six, the results not being sufficiently encouraging to warrant their further employment.

(ii) Of the ten cases in which vaccine treatment was undoubtedly followed by improvement, the Bac. mucosus ozænæ (Abel) was cultivated and employed in nine. In six a pure culture was obtained: in the remaining three it was associated with the streptococcus pyogenes and a diphtheroid bacillus in two, in one with the pneumococcus and staphylococcus aureus. In the tenth case a mixed culture of staphylococcus aureus and a gram-bacillus was obtained.

In nine cases, therefore, the vaccine contained Abel's bacillus, in six being used in pure culture. The number of injections varied from six to fourteen. The dose of the Abel's bacillus varied from 50,000,000 to 500,000,000 bacilli. The improvement that was noticeable alike to the patient and the observer varied in degree but was obvious in all. In five of the cases there was less crusting, less discharge, and an almost complete disappearance of the odour and the patient felt better. In five patients the crusting disappeared and in two of them the headaches ceased. In two, again, in whom there was no longer any crusting, some slight discharge remained. As regards the duration of this improvement, the following points were noted: two patients seen two months after the commencement of treatment showed no crusts, and no syringing was being carried out. One patient seen four months later had no crusts or odour, but a very slight discharge. One patient seen six months later had no discharge or crusting, and one had no discharge, odour, or headaches, eight months after the last injection.

4. In this group there are *five cases of accessory sinus suppuration.* In one case, left-sided frontal and maxillary sinus suppuration, no operation was performed, but the treatment consisted in nasal douching and the administration of a staphylococcal vaccine along with a gram-bacillus. After five injections had been given, there seemed to be some diminution in the amount of the discharge, but as the improvement was doubtful, the treatment was not continued.

In the remaining four cases, vaccines were employed after operative interferenze with the view of accelerating the healing. In one case of bilateral ethmoidal suppuration, after intra-nasal operation, a mixed vaccine of streptococcus pyogenes and staphylococcus aureus was administered. Six injections were given without improvement. In one case after the radical antral operation a vaccine was used, but it was of course difficult to estimate the part played by the vaccine. In a third case, in which an intra-nasal operation had been performed on the antrum, very little improvement followed lavage carried out for nearly three months. A staphylococcal vaccine was then used, improvement commenced and cure resulted. The fourth case was one of radical operation upon the frontal and ethmoidal cells, in which a fistulous opening persisted in the lower part of the incision for many weeks, apparently due to the persistence of some discharge from the ethmoidal region. A vaccine of the pneumo-bacillus was prepared and after three injections there was a marked change both in the character and amount of the discharge which gradually ceased and the wound permanently closed. Vaccines may prove a useful adjunct in the treatment of sinus suppuration after operation.

In conclusion we desire to express our sincere thanks to Dr. J. S. Fraser for permission to incorporate some of his cases in this paper and also to Dr. W. G. Porter and Dr. Ian Struthers Stewart for the use of three cases of ozæna under their care. Our thanks are also due to Dr. Shennan and the staff of the Pathological Department of the Royal Infirmary, Edinburgh, for the preparation of the vaccines.

PRESIDENTIAL ADDRESS ON CLINICAL PSYCHIATRY. (a)

By THEO. B. HYSLOP, M.D., C.M., F.R.S.E.

After thanking the Society for his election to the Presidential chair, the author remarked that the prevailing tendency for most thinkers is to endeavour to evolve the data of body and mind from other data derived from the study of embryology or epistemology, and with this tendency we must of necessity approve. A very little reflection, however, will show that evolution is only another name for transformation or change, and that, no matter how demonstrable and self-sufficing the demonstrable data of transformation may be, they do not deal with the phenomena of origin of the fundamental bases of life and mind on which the transformations evolve.

This tendency to evolve one thing from another has of necessity its limitations. Thus, for instance, the human mind cannot be regarded. or spoken of, in terms of energy; nor can we regard it as being a transformation of energy, for this would at once bring to the ground the fundamental dogma of science, that energy itself is indestructible and therefore incapable of conversion into anything other than energy. Here, therefore, we are forced to the conclusion that the phenomena of life and mind must be parallel in their collateral series of phenomena, and, since parallel lines do not meet, it therefore becomes inconceivable that either in time or space there ever was a beginning of the one, apart from a beginning of the other—if there ever really was a beginning of both or of either. The philosophical conclusion derived from the facts of physics and psychology is that mind in its ultimate essence is co-extensive in time and space with energy. With regard to the ultimate essence of mind or of matter, we must perforce be satisfied with hypotheses or conjectures, and it behoves us to recognise our limitations. With regard to the continued and earnest study of the phenomena of mind and energy in their parallel or apposite series of manifestations it is quite another matter, and it would be foolish to suppose that our conceptions as to the scope and extent of the connection may not in due course receive much further elucidation.

Clinical psychiatry is as a science still very young. Lugaro, in his memorable work on "Modern Problems in Psychiatry," points out that he whose custom it is to indulge in fatuous enthusiasm and pretentious language will possibly, at every inaugural discourse—either on the occasion of a congress in psychiatry, or at the opening of a conference—hail with a flourish of trumpets the tremendous progress made and the results accomplished, and extol the pre-eminence of psychiatry over other branches of clinical medicine; but there can be no doubt that the progress of psychiatry has been slow, laboured and rather unsatisfactory. That the science of psychiatry has not as yet attained such satisfactory results as those of surgery and several departments of medicine is not to be wondered at when we remember that psychiatry is not only a science of extreme complexity in itself, but it also embraces all the most intricate problems of biology and medicine. Lugaro fully appreciated this difficulty when he stated that the intimate contact which psychiatry assumes with the most varied doctrines and with the most diverse fields of social activity raises a host of current scientific, religious, metaphysical, philosophical and ethical prejudices against it, which paralyse its efforts and hamper its progress. Clinical psychiatry has the two-fold task of considering not only the psychic symptomatology of mental diseases, and this must, of necessity, go hand in hand with the study of normal psychology, but also the anatomical, physiological and pathological conditions which form the organic process or essential basis.

The history of clinical psychiatry consists in great part of the perhaps somewhat futile efforts of innumerable writers to bring within one comprehensive classification all the phenomena of mind and brain, taking note of the data of development, mental and physiological symptomatology, together with the various factors of causation. Little wonder is it, therefore, that each new classification, instead of leading to real progress and clearness of understanding, has but added to the prevailing confusion and obscured the issues of greater importance. Thus it is that many of the more recent works on clinical psychiatry, whilst possibly adding to the sum of our knowledge, have oftentimes been merely repetitions of data already acquired, but played out in new hands after a re-shuffling of the cards. To this tendency in modern psychiatry, the benefit to be accrued is apt to be negatived by the confusion and delay so occasioned. Our danger appears to be, when dealing with the human mind and body, lest we should think in text-book terms and thereby tend to lose sight of processes. I would express this more tersely by stating that mere labelling does not imply delivery. Within the last few years some of the riddles of the psychoses have been newly propounded through the medium of Freud, of Vienna, and undoubtedly his methods have in some instances led to a more thorough understanding of the origin and development of various abnormal mental states. To Bleuler, Jung and their co-workers at Zurich and to many others of the Freudian school we are indebted for further elucidation by analysis of many psychical problems. I will not anticipate events, however, as one of our meetings this session will be devoted to the subject of Freud and his School of Investigation.

When we review the data of physiology of the nervous system, we see how much we have been indebted to experimental destruction or excitation of macroscopical parts accessible by vivisection. Microscopical anatomy has also advanced to such an extent that individual morphological types of nerve cells have been not only recognised, but have also occasioned many vague conjectures as to their nature. The homologies of structure of the cells in the cerebral cortex have led some observers to conclude that in the nervous system there are no two cells, nor any two fibres possessing absolutely identical function. That the cerebral cortex is a vast field for further pathological research no one will deny, and it is possible that in the future we may yet be able to draw more satisfactory inferences regarding the functions of single units than we should be justified in doing to-day.

By means of macroscopical and microscopical research, we are now in possession of innumerable data in connection with the nervous system and its cellular units or neurones, but here again we must patiently await the results of further investigations before venturing to generalise. It may be stated with truth that up to the present the anatomical facts already noted, instead of elucidating the problems as to the physical basis of mental processes, tend rather to increase our difficulty in understanding the complex mechanism of the nervous system.

In a paper read before this society in May last year, I endeavoured to demonstrate to you some considerations as to the intracranial mechanism in health and disease, and it seemed to me that by the adoption of a preliminary mechanical and mathematical method of study of the cranial contents, we might be enabled thereby to gain a more rational and intelligent appreciation of some of the apparently most difficult of the problems of clinical psychiatry.

(a) Delivered before the Chelsea Clinical Society at the meeting held at St. George's Hospital, October 21st, 1913.

The usefulness of applying these mechanical and mathematical principles for the explanation of intracranial disease is evidenced in a remarkable degree when we study the disturbances from which the brain and its adnexa are prone to suffer. Thus, arterial inflammatory affections, capillary engorgements, and increase of serous exudation and diapedesis of leucocytes, with ultimate formation of connective tissues, can be represented by more or less definite formulæ. Similarly, alterations in the relative proportions of the lymph as a whole or in its relationship to individual units such as the neurons can be defined in mathematical terms, and, lastly, the processes of excretion by the lymphatics, the venules, veins and sinuses may be considered either separately or in their entirety. Intracranial physics has not yet elaborated the mechanism of backward pressure in the vascular structures, and seldom do we find anything in treatises on diseases of the brain which tends to throw much light upon the mechanism or results of backward venous pressure. We know that venous congestion and stasis do occur, and that the surface veins of the brain are in almost immediate juxtaposition to various brain centres, but the variations in venous pressure and their effects on the cortex as occurring in health and disease have as yet been scarcely touched upon. We have here, therefore, an almost unexplored field for research.

Neurasthenia, a Disease of Civilisation.

From the clinical standpoint, there would appear to be no affection, or group symptoms, or syndrome, more prevalent or more likely to become more increasingly prevalent, than that of neurasthenia. It is a disease of civilisation, and it is also, in my opinion, a warning that over-pressure, when combined with defective bodily health, can have but one result, viz., degeneration. A quarter of a century of study of mental and nervous ill-health has taught me one great truth, viz., the nervous system is in itself capable of vast and continued exertion so long as it is properly and efficiently served by the body mechanism of waste and repair. Needless to say, the finer and the more sensitive the nervous mechanism, the greater the need for the careful regulation of its nutritive and excretory processes. Over and over again is this exemplified in connection with some forms of nervous and mental disorder, which are regarded as hereditary and therefore incurable, whereas the disorders are in reality but due to the hereditary defects of the bodily mechanism whereby the waste and repair of the nervous system are duly affected.

The truth of this statement is exemplified in families which suffer from glandular anomalies with imperfect balance of the nutritional and metabolical processes. The thyroid and the parathyroid] apparatus are still so much discussed by physiologists that we are as yet unable to formulate definite views as to their functions in the bodily economy, but we are nevertheless fully aware of their importance in maintaining health. Undoubtedly many forms of psychoses, both alternating, progressive, and permanent, may be traced to defects in these or other glands; the nervous system itself being merely a participant in the general metabolic defect. Speaking generally, it may with a certain degree of certainty be stated that all the rhythmical, alternating and intermittent psychoses are due to faults in the mechanism of waste and repair as determined by the various organs of secretion and excretion. Since advancing this theory in a paper read before the Harveian Society some years ago, I have become more and more satisfied with its truth, and I do not think it is too positive an assertion to make when I state that every form of psychosis which is rhythmical or alternating in its occurrence is somatic and extracranial in its origin.

Health or Perversion of Cerebral Functions.

The circulatory system is the means whereby nutrition and cerebral metabolism are duly effected, and in their relationship to the general circulation the contents of the cranium hold a somewhat similar position to those of the pelvis, or even the limbs. It is a common observation that venous congestion of the pelvic viscera is a usual accompaniment of diminished blood pressure, and this is also attended by diminished activities within the viscera, as evidenced by deficient peristalsis, constipation, etc., etc. It is now granted by many clinicians that somewhat similar venous congestive stasis pertains in the limbs and other regions, and even in the cranium itself. I have dealt elsewhere in detail with the mechanism of the intracranial contents and have shown how increase of the fluid contents of the cranium becomes possible only by compensatory diminution of other of the fluid contents. In a previous paper read before this society, I pointed out that the cranial cavity may be compared to that of a hose syringe, the perforations at its nozzle corresponding to the usual points of egress for the fluids (*i.e.*, the normal channels into the veins, lymphatics, and the spinal column). If we close some of the numerous orifices at the base of the skull normal conditions are able to resist the outflow of fluids from the cranium. Any displacement of fluid takes place along the lines of least resistance, and it will pass out of the skull in physiological conditions of health. If, however, this process of displacement is arrested, the fluid then seeks to escape from the points of lesser resistance, and the phenomena of dizziness, ringing in the ears, flashes of light, rhinorrhœa, choked disc, etc., are occasioned, the intracranial fluid seeking to escape by unusual channels.

Certain it is that in many of the cases of neurasthenia studied by me the general blood pressure has been subnormal and the clinical symptoms have been such as would arise in consequence of venous congestion of the various orifices of egress from the skull. Any diminution in the force of the arterial wave is attended by a corresponding sluggishness in the venous return, and it is to the various groups or syndromes of symptoms thereby occasioned that we usually apply the term neurasthenia. It would take up too much of the time available were I to attempt to deal in detail with the various conditions determined by venous congestion of the various orifices of the skull. I have but to mention hæmatoma auris, adenoids, etc., to show the wide scope of the enquiry. I would, however, make brief reference to the comparatively rare conditions of blocking of the small emissary vein of Santorini in association with thrombosis of the lateral sinus. I have seen this occur in several instances. In one instance, the occurrence of swelling over the mastoid region was followed by relief from acute mania, but only to relapse again to the maniacal state on the subsidence of the swelling.

Venous Congestion and Stasis.

That venous congestion and even stasis is much more common in insanity than is generally supposed is borne out by Mott ("Croonian Lectures," 1900, p. 50), who, in referring to the conditions of the disease, said that "in most instances a striking naked-eye feature was the distension of the veins with blood, and frequently there was sub-pial hæmorrhage; also the peri-vascular lymphatics were usually distended with fluid. No doubt both the increase of blood in the superficial veins, the increase of fluid in the peri-vascular lymphatics, and the general œdema of the brain itself, were proportional and compensatory to the diminution of the arterial blood. The arteries were generally empty, likewise the capillaries. In some cases the peri-vascular lymphatics and membranes were the seat of a marked cellular infiltration resembling the condition found in general paralysis. Collateral circulation to the medulla, by which the respiratory centre is kept going, is essential to life. Such collateral circulation when established—and if the animal lives it must have been established—would be accompanied by blood-supply to the choroid plexus, and the cerebro-spinal fluid, which functions as the lymph of the brain, would consequently be secreted in abundance and soon compensate for the diminution caused by the failure of the arterial circulation. Thus the increase of cerebro-spinal fluid would account for the œdema of the brain, the dropsical condition of the cells, and the dilatation of peri-vascular lymphatics.

In reference to the effects of cerebral anæmia experimentally produced, he says (*op. cit.* pp. 52 and 53) : "Arteries in this disease are seldom occluded, whereas congestive stasis in the arterioles, capillaries, and veins is common, even thrombosis in the latter may occur ; and we may consider that the destruction of the nervous tissue of the cortex may be accelerated by inflammatory stasis. It is curious how general it is to find the brain atrophy in this disease limited particularly to the frontal and central convolutions, whereas the occipital and temporal lobes escape in great measure. Over the atrophied regions the pia-arachnoid membrane is thickened and adherent. Many observers, including Flechsig and Mickle, consider that the region of atrophy and pia-arachnoid thickening more closely corresponds with the distribution of veins which open into the longitudinal sinus, and from a large number of observations made by myself and my assistants, I have come to the conclusion that venous congestive stasis in that portion of the brain plays an important part in the symptomatology and pathology of general paralysis."

Full credit must be given to Mott for his most valuable and suggestive work in this direction, and my own observations entirely agree with his, that venous congestion does play an important part in the production of congestive, epileptiform and apoplectiform seizures of general paralysis, as is shown by the fact that a brisk purge or an enema will often prevent or cut short these seizures, presumably by relieving frontal congestion and general venous turgescence.

With regard to clinical psychiatry, we are well aware that hallucinations of hearing are not only exceedingly common in their occurrence, but they also form an element of serious import in regard to the development and course of the insanity. The reason for this is to be sought in the fact that not only is the sense of hearing the least protected, but the region of the brain in which its centre is situate is the region of greatest wear and tear and the region where arterial and venous derangements are most likely to occur. This is exemplified by the clinical fact that in toxic or other defective states perversions of hearing are not only some of the earliest symptoms to appear, but they are the last to disappear, and they are certainly the most difficult to treat. In this connection, I may state that so seriously do I regard these hallucinations that I have been in the habit of treating them by the apparently heroic method of procuring complete rest of the auditory centres by the induction of deafness by the simple means of plugging the auditory meatus with a suitably devised plug of ordinary paraffin wax. The results obtained by this method have been in most instances remarkable, and in the course of three or four days the hallucinations have usually entirely disappeared.

In these few remarks I am fully aware how limited has been the scope of my address, and there are innumerable questions which it might be fitting to discuss, but it is obviously quite impossible to here elaborate a field of enquiry which is fraught with such extreme difficulty in almost every conceivable direction. I will conclude, therefore, with the personal statement that with regard to clinical psychiatry, the longer I live and the greater my experience, the more do I come to see that the human brain is capable of almost infinite vigour and development so long as it is faithfully served by the body to which it must look for its nourishment and repair. If perchance the human mind is to be capable of manifesting itself in its fulness, depth and vigour, it needs must have for its instrument a bodily mechanism which shall serve it faithfully and well.

I have dealt somewhat in detail with these conditions of venous congestion and stasis, because it appears to me that whereas the brain convolutions, in their relationships to arterial blood-supply, have been so fully discussed, the venous drainage has received but scant attention. The temptation to enter upon a full description of the venous drainage from the various convolutions is great, but for present purposes it would be too lengthy an undertaking. Suffice it to say that careful consideration of the mechanics of the intracranial circulation and the relationships of the systems of drainage to the various cortical areas has gradually enabled me to formulate a series of syndromes, based mainly upon the conditions of venous drainage from the various convolutions. That these syndromes have anatomical and pathological explanations which are borne out by observation and by the effects of appropriate treatment it will be my endeavour to prove in a more extensive way elsewhere.

OPERATING THEATRES.

ROYAL NATIONAL ORTHOPÆDIC HOSPITAL.

Operation for Deformity Resulting from Fracture of the Femur.—Mr. Jackson Clarke operated on a man, æt. 35, who had been admitted with a history that some years ago he had sustained a fracture of both thigh bones in the following manner : He was seeking sea birds' eggs on the cliffs at Anglesea, and slipping over the edge at a point where the rocky cliff face was vertical and, according to the patient's statement, over 80 feet in height, he fell. In falling he kept upright, alighting on his feet upon hard rock ; he then fell forward and lay helpless. He maintained consciousness throughout, and the result of immediate treatment left him very lame, unable to go upstairs or mount a ladder, and so incapacitated from following his occupation (a lighthouse keeper).

On examination at the hospital, some four or five years after the accident, the right great trochanter was found to be elevated two inches above its normal position and the right thigh to be adducted. The left femur had been broken just below its middle, and the fragments had united firmly, the fragments being inclined at an angle of 40°, salient outwards. Radiographic examination showed that the head of the right femur had been cut off flush with the rim of the acetabulum, and that the fragments of the fractured left femur were solidly united by a spherical mass of new bone.

First Operation.—The patient at first only desired the right hip to be operated on, and this was done with the view of securing some co-aptation of the upper end of the femur and the acetabulum, as well as of removing the adduction. For the latter purpose the adductor longus was divided near its origin. The region of the hip-joint was then exposed by an anterior incision, the upper part of which was prolonged backwards just below the iliac crest. By dissection through this incision the tensor fasciæ femoris and the fore parts of the gluteus medius and the gluteus minimus were turned down, the rectus and sartorius being drawn inwards ; the upper and front parts of the capsule of the joint were thus fully exposed. The joint was then opened by an incision between the two parts of the Y ligament. On retracting the lips of this capsular incision, both the acetabulum and the inner and upper ends of the femur were fully exposed. The neck of the bone had been totally absorbed except for a small spur at its lowest part. The head of the bone had also undergone some absorption. On abducting the limb and making traction thereon it was found that the spur-like remains of the neck could be made to enter the acetabulum, and after the latter had been somewhat deepened by scraping, the limb being maintained in the abducted position, the capsule was sewn up by catgut sutures, as was also the remainder of the wound. The limb was put up in the abducted position. The patient's convalescence was uneventful, and at the end of a few weeks he was walking about. He found that he could go upstairs, which he could not do before. He soon left the hospital.

The effects of the first operation were so good that the patient came back a year later to have his left femur operated on.

Second Operation.—An incision was made on the outer aspect of the left thigh with the convexity backwards; a flap was raised up of skin and fasciæ, exposing the anterior border of the vastus externus, this muscle was separated from the cruræus, and the latter incised down to the bone. The region of the fracture was then cleared by means of a rugine, a wedge of bone was now taken away by means of saw and chisel, the base of the wedge being external. Two four-hole Lane's plates were selected, adjusted to the surface of the bone and fixed by two screws each; the soft parts were then drawn together by means of catgut sutures, and the limb put up on a long outside splint, supported by three malleable steel splints adjusted to the outer surface of the dressing.

Convalescence was again uneventful, and at the end of the third week a single Thomas's hip splint was applied in place of the other splints. At the end of the seventh week, a firm mass of callus having formed, the patient was allowed to stand. The thigh is now in its proper line, and it is probable that the patient will be able to resume his occupation.

Mr. Jackson Clarke said that the second operation was an example of the operative *technique* introduced by Sir Arbuthnot Lane, and emphasis should be laid on some points, such as a faultless asepsis, a free incision to give ample access to the parts, the muscles being separated as far as possible rather than divided, and when their division is inevitable it should be done at as great a distance as possible from their supplying nerves; it was for this reason that the cruræus was incised towards its outer part. Finally he insisted upon the importance of restoring not only the muscles but also the fasciæ by means of catgut sutures.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Clinical Section.

Meeting held November 14th, 1913.

Mr. Charters J. Symonds, President, in the Chair.

EXHIBITION OF CLINICAL CASES.

Dr. A. M. Gossage showed a case of subcutaneous granulomata. It was that of a girl, æt. 3½, who was admitted into hospital on August 12th last for stiffness in the left knee and pain and stiffness in the left wrist. At the age of two her mother noticed that the left knee was held stiff and slightly bent so as to make her walk awkwardly. Lately this had been worse, and the child frequently wanted to rest. Three days before admission the left hand was noticed to be doubled up, and she complained of pain in her wrist. No lumps had been noticed in the trunk or head.

On admission she was found to be a healthy-looking child. The left wrist was flexed, and the dorsum of the left hand was somewhat swollen; anteriorly over the tendons at the wrist there was some reddish discoloration, and there was some thickening under the skin. The child was unable voluntarily to extend the hand and fingers, whilst forcible extension caused pain. There were about twenty subcutaneous nodules, from the size of a millet seed up to a small pea, under the skin of the scalp, neck, and trunk. The left knee was apparently normal, and no other abnormality could be found elsewhere.

In the night of August 29th there appeared pain and swelling in front of the right wrist, with flexion of the wrist and some swelling in the dorsum of the hand. On examination a precisely similar condition was found to that in the left wrist—*i.e.*, some thickening and discoloration of the skin, and subcutaneous swelling, which appeared to be formed of several nodules matted together, with involvement of the subjacent tendons.

On September 16th it was noticed that the right knee was sometimes drawn up, and that the child seemed unable to straighten the leg again, but forcible replacement by the nurse caused no pain, and the knee subsequently seemed normal and there was no swelling.

There was no alteration in the condition until October 3rd, when she was ordered pot. iod. 3 gr., t.d.s. Since then the tumours had got smaller and many had disappeared, whilst the swelling in front of the wrists had diminished, and the movements of the hands and wrists had become painless and more free.

On September 9th two of the tumours were cut out, and were subsequently examined by Dr. Hebb, who reported as follows: "Both tumours are surrounded by a zone of connective tissue in which are reticular histological tubercles with numerous large giant cells. The central areas are filled with some homogeneous substance which is crowded with small cells of irregular shape; also certain bodies, somewhat resembling in appearance Charcot-Leyden crystals," are demonstrable by the Ziehl-Nielson method. The nature of the growth was uncertain. No organisms were discovered. The tumours having been put directly into formalin, no culture could be made for them.

The Wassermann and von Pirquet reactions were both negative.

Dr. Gossage said that the three probable causes for granulomata of this type were: (1) syphilis, (2) tubercle, and (3) sporotrichosis. There was nothing in family or personal history to suggest syphilis, and with a negative Wassermann reaction this might be excluded. The histological appearances, the rapid improvement with iodide of potassium, and the negative von Pirquet reaction similarly weighed against the diagnosis of tubercle. In the absence of a culture of the organism one could not be certain of the diagnosis of sporotrichosis, but this seemed to be that which was most probably correct. It was to be noticed that there was no tendency for the tumours to break down in the two months before treatment with iodide was commenced.

Mr. W. J. Midelton showed two cases of arthritis deformans treated by continuous counter-irritation. Woman, æt. 60. Sixteen years ago she first noticed rheumatic symptoms; the joints of the fingers, knees, and ankles eventually became markedly swollen up to two years ago in spite of treatment. Severe attacks of sciatica occurred at times. The patient was first seen by Mr. Midelton with a view to treatment two years ago. At that time she was very depressed, and in much pain. Salicylates relieved the latter somewhat, but increased the depression. On examination the patient was found to be too thin; all the phalangeal joints were swollen and of the rheumatoid type. The fingers were cyanosed. The knees and ankles showed enlargement of a soft character with little or no bony change. There were soft pads beneath the ligamenta patellæ bulging on each side. The legs were slightly œdematous. There was a fibrous nodule at the back of the proximal phalanx of the left thumb, about the size of a small hazel-nut and very hard. Subcutaneous tissue of legs thickened, and suggestive of myxœdema. The toes were cyanosed and the nails withered very much, having practically disappeared in several instances. Very few teeth remained; the patient had obviously suffered for many years from pyorrhœa alveolaris, and the teeth had in most instances become so loose as to need extraction. No marked affection of heart or lungs was found, but the stomach and bowels were thought to be atonic. Treatment by means of continuous counter-irritation was commenced on September 27th, 1911. October 31st: Swelling gone from fingers and tenderness from feet. Eventually became so well and active that she undertook strenuous work; on her feet all day, and out socially at night. She had had slight recurrences from time to time, but the treatment always readily subdued them, and the patient remained well and active. The pads had gone from beneath the patellar ligaments, the nodule from the thumb. She was wearing shoes that had been put aside for years. Her attacks of sciatica were now slight. The toe-nails had grown again. Excessive fatigue contributed more to recurrences than anything else.

II.—A woman, æt. 54. Five years ago the ankles swelled; at about the same time she had a "paralytic seizure"; the right arm and left leg and back of neck being effected. There was difficulty in moving the head and much pain. Her walking power gradually returned but was variable. She suffered from syncopal attacks, with, at times, actual loss of consciousness lasting two hours. The attacks had increased in severity. All the joints were more or less tender and stiff but not much swollen. There was loss of muscular power in the knees, their flexion and extension being limited. The right elbow and neck were very tender. A typical rheumatoid condition of the first and second metacarpophalangeal joints was present. The skin of four fingers was glossy, the wrists were puffy but moved fairly well, she was scarcely able to move the head at all, the features being mask-like; the right arm was practically useless. Teeth: many out, remainder infected at roots. Treatment by continuous counter-irritation was commenced in February, 1912. The patient had not been out of the house for four months when first seen, and a very gloomy prognosis had been given. The heart had been thought to be in an advanced state of fatty degeneration. Within a very short time after the commencement of treatment by means of counter-irritation the patient greatly improved. She regained power to write, sew, walk up and down stairs easily, etc. The patient had become increasingly active and had practically ceased to have any syncopal attacks; she still had treatment from time to time.

Dr. F. Parkes Weber showed a case of rheumatic nodules associated with rheumatic torticollis. The patient, æt. 11, was a pale, rather delicate-looking boy with a certain degree of wry-neck, the neck being bent towards the patient's right with the chin turned a little to the left, and there was no arthritis, nor did the boy complain of any pain or tenderness anywhere, but there was some puffiness about the second and third metacarpo-phalangeal joints in both hands, and over these joints very small rheumatic nodules could be seen and felt. There were moderate-sized rheumatic nodules over both elbows and both knees, those over the knees being the largest and the most numerous. The olecranon bursa at both elbows was enlarged. The heart was excitable in action and the impurity of the first sound at the apex suggested slight endocardial changes at the mitral valve. In the absence of fever the frequency as well as the excitability of the heart's action suggested slight myocardial implication. There was a variable systolic murmur to be heard over the "pulmonary area." Some of the lymphatic glands in the neck were a little enlarged.

The history was that the boy enjoyed good health until the present illness commenced on September 13th, 1913, with a pain in the left ankle; this joint became swollen on the following day. He was treated by rest in bed and small doses of salicylates.

The wry-neck appeared at the end of September, and was at first accompanied by a little pain at the lower posterior part of the right side of the neck. The rheumatic nodules were first noticed in the middle of October, at first only on the elbows and knees, later over the hands also. Recently he had been treated with subcutaneous injections of rheumatism "phylacogen," and with careful massage of the neck. Röntgen-ray examination showed no bony change in the neck. The special interest of the present case was the association of the wry-neck with rheumatic nodules and affection of the olecranon bursæ, suggesting that a kind of true "rheumatic fibrosis," analogous to that which produced rheumatic nodules over the periosteum and fibrous structures, was the cause of the wry-neck.

Dr. F. Parkes Weber also showed a case of angiokeratoma with bony changes. The patient, æt. 16, was a physically rather under-grown and under-developed boy, mentally quite normal. His extremities were inclined to be cyanosed, and in winter, since the age of 4, he had suffered severely from chilblains of the hands and feet, which had left a good deal of scarring. Owing to these cicatricial changes, the movement in some of the terminal finger-joints and in the toes had become very limited. On the hands were a number of dirty-reddish spots which were minute warts on angiomatous (telangiectatic) bases; they added a peculiar speckled appearance to the cicatrisation resulting from the chilblains. On the feet, in addition to the scarring of the toes from chilblains, there were a number of large hard "corns" (keratoma); some of these resembled the callosities which occasionally preceded perforating ulcers. In the Röntgen-ray skiagrams of the hands and feet, the terminal phalanges of the hands appeared somewhat stunted, and there was slight general rarefaction of all the handbones; in the feet there was marked deformity of the terminal phalanges, and there was more rarefaction of the bones than in the hands; the distal portion of the terminal phalanx of the left big toe had disappeared, as if by a process of absorption, like that sometimes seen in Raynaud's disease. In spite, however, of the tendency to cyanosis of the extremities, the patient had never had any definite attacks of Raynaud's phenomena. The knee-jerks were exaggerated, but there were no signs of syringomyelia or other organic nervous diseases. Nor was there evidence of disease of any of the abdominal or thoracic viscera.

The chilblain-like condition ordinarily associated with angiokeratoma of the hands and feet seemed to him insufficient in the present case to account for the bony changes revealed by Röntgen-ray examination; and yet there had been no definite attacks of Raynaud's phenomena nor local tuberculous disease to account for them.

Dr. W. Essex Wynter showed a case of hæmophilia. The patient, a man, æt. 22, was admitted to hospital in November, 1913, for hæmaturia. There were four sons, of whom patient was the youngest, and no daughters. The eldest and second were both alive and well. The third died at the age of 15. He was a bleeder. The patient remembered his once cutting his thumb, which bled for days and led to his being admitted to hospital. He also had, occasionally, swelling of joints which lasted some weeks. The patient himself, before he was æt. 8 partly remembered and had been told that he had frequently painful swellings in the knees which necessitated his staying in bed, but always cleared up eventually. When æt. 9, he had an attack of hæmaturia, unaccompanied by pain, which kept him in bed for fourteen days.

The present attack of hæmaturia commenced ten days before admission with slight coloration, which gradually became more intense. The following day there was an attack of pain shooting down to the groin on the right side and lasting half-an-hour. Swelling of the right elbow commenced a week before admission accompanied by stiffness and some redness, a similar attack having occurred a month previously. When shown the patient was a healthy-looking youth with bright complexion and was well nourished. There was some swelling and limitation of movement in the right elbow and ecchymosis of the skin in the outer and flexor aspect. The urine was almost porter coloured and opaque, specific gravity 1020, acid, and contained albumin corresponding with the blood. Corpuscles were present in quantity. An X-ray examination disclosed no stone, nor any enlargement of kidneys. The organs appeared quite normal, and apart from the hæmorrhage there was no sign or feeling of illness.

Dr. J. H. Drysdale and Mr. G. E. Gask showed a case of splenic anæmia; splenectomy. Hæmatemesis eighteen months after the operation. The boy, æt. 16, was admitted to hospital in December, 1911, for hæmatemesis and enlargement of the spleen.

Two years before admission he first noticed a large lump in the left side of the abdomen. Since then he had gradually become paler and had been subject to attacks of giddiness. Four months and again two months before admission he vomited up a large amount of blood.

On admission the spleen was found to be much enlarged. Red cells, 3,525,000; hæmoglobin, 45 per cent.; colour index, 0.64; poikilocytosis; polychromatophilia present; whites, 3,000; all forms diminished in numbers; a few myelocytes. Wassermann's reaction was negative.

January, 1912: The spleen was excised by Mr. Gask, along with two or three spleniculi.

March: Red cells, 3,900,000; hæmoglobin, 54 per cent; colour index, 0.7; white, 6,400; polymorphonuclears, 2,816; lymphocytes, 2,816; large mononuclears, 678; eosinophiles, 38, and basophiles, 114 per cubic millimetre.

He remained in good health till July of this year, when he vomited more than a pint of blood and fainted. He slowly recovered, and in September, after a short fit of coughing, brought up a thick silk ligature.

He was readmitted in October.

His blood count now was: Red cells, 5,400,000; hæmoglobin, 90 per cent.; colour index, 0.83; whites, 6,600; polymorphonuclears, 2,574; lymphocytes, 3,630; large mononuclears, 99; eosinophiles, 198, and basophiles, 99 per cubic millimetre; no nucleated reds or myelocytes were seen. The red cells showed excessive variations in size and depth of staining reaction. Poikilocytes were numerous; reticulate cells 1.8 per cent.; fragility:—hæmolysis began between 0.45 and 0.4 and was not complete before 0.3.

The interest of the case lay in the recurrence of the hæmatemesis eighteen months after the removal of the spleen. Patients with splenic anæmia might live for twenty or thirty years without surgical interference, and they died sometimes as the result of operation. If they were to remain liable to attacks of hæmatemesis—which was, after all, their most dangerous symptom after splenectomy had been performed—it raised the question as to how far the operation was advisable. This patient was not cured of his disease, for apart from the attack of hæmatemesis he still had a leucopænia, his polymorphonuclears were only half the proper number, and many of his red cells showed abnormalities. His general condition was certainly improved, but one was precluded from saying that his life was safe from the dangers of splenic anæmia.

Dr. Arthur F. Hertz and Mr. D. W. Johnson showed a case of cervical rib with marked vascular symptoms in a woman, æt. 45, and a case of myatonia congenita in a boy at 3½ years.

Mr. C. A. Ballance showed a woman, æt. 20, whose facial paralysis had been treated by facio-hypoglossal anastomosis (end to end), and end to end anastomosis of the descendens noni to the hypoglossal.

Mr. W. H. Battle showed a case of microglossia in a child æt. 1 year and 5 months.

Dr. Albert Wilson read a short paper on the treatment of syphilis by ars-acetin and by excision of the primary sore.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Clinical Meeting held in the Royal Infirmary, Wednesday, November 19th, 1913.

The Vice-President, Dr. Melville Dunlop, in the Chair.

Dr. Dawson Turner showed a case of nævus and a case of cheloid under treatment by radium.

Dr. Norman Walker showed a case of nævus and a case of dermatitis autophyta.

Dr. J. D. Comrie showed a child, æt. 7, suffering from spastic paraplegia. She could stand, but was unable to walk. Intelligence was good and the arms were strong. The lesion was probably a congenital defect at the upper end of each Rolandic area.

Dr. R. A. Fleming showed two cases of beri-beri, one of wet and the other of dry type.

Dr. Edwin Bramwell showed two brothers who suffered from progressive difficulty in walking, with spastic paraplegia, intention tremors, and defective articulation. The cases were intermediate between Friedreich's ataxia and family spastic paraplegia.

Dr. Gulland showed four cases of aneurysm.

Mr. John Fraser showed a child, six months old, in whom he had transplanted a portion of the fibula to make good a congenital deficiency of the tibia on the opposite side.

Mr. Beesly showed a patient after interscapulothoracic amputation for tuberculous disease with sinuses. The shoulder-joint had been excised for tuberculous disease two years before, and the arm had been useful for two years before disease recurred.

Mr. Wallace showed a case of diastasis of the lower end of the femur after plating; and a man, æt. 46, after resection of the middle portion of the stomach for carcinoma.

Mr. Wilkie showed a boy, æt. 8, suffering from osteo-chondritis deformans juvenilis. The condition was probably due to an accidental interference with the blood supply of the head of the femur, and after two or three years recovery might be expected.

Mr. Dowden showed two cases of fracture of both bones of the leg which had been treated by hanging the legs over the end of the bed without splints. There had been marked shortening before the treatment. There was great œdema. In one case union was somewhat delayed, in the other union was rapid. The result in both cases was good.

Mr. George Chiene showed a woman, æt. 42, who had suffered from symptoms of intestinal obstruction. The condition found was strangulation of an epiploic appendix in a subsidiary peritoneal pouch.

Mr. Struthers showed a man suffering from deformities due to ostitis fibrosa; and a boy, æt. 9, who first had symptoms of Jacksonian epilepsy and then generalised epilepsy. He had remained well for seven months after trephining, although nothing to account for the fits had been found.

Mr. Cathcart showed a man after operation for tuberculous glands in the neck, where the internal jugular vein was torn close to the skull and closed by plugging.

Mr. Cathcart also showed a man finally cured of recurrent fibroid tumours of the neck and face after six operations. Carcinoma of the splenic flexure of the colon afterwards developed.

LIVERPOOL MEDICAL INSTITUTION.

The First Pathological Meeting of the Session, held on November 13th, 1913.

Mr. F. T. Paul, F.R.C.S., in the Chair.

The following specimens were shown and described:—

Mr. R. W. Murray: (1) Large sacculated popliteal aneurysm from the amputated limb of a man 56 years of age; (2) the amputated leg of a woman 50 years of age with elephantiasis, the limb after amputation weighed 64 lbs. The patient had never been out of this country, and had carried on her work as a washerwoman up to the time of her admission to hospital.

Mr. Adair Dighton showed sections illustrating sarcoma of the nose, one section being of the nasal tumour and the other of the glands in the neck.

Dr. Stopford Taylor and Dr. MacKenna showed a nasal polypus of tuberculous origin.

Mr. Newbolt showed (1) myxoma of the parotid; (2) epithelioma of the jaw.

Mr. Kelly and Professor Ernest Glynn showed (1) some specimens from three cases of abdominal trauma. They included ruptured liver, ruptured spleen, fat necrosis, etc. Mr. Kelly considered that the rectus aponeurosis was the best material to use for suturing the liver; this material did not cut through. (2) Carcinoma of the pylorus removed at operation; (3) a congenital cystic kidney; (4) a suicidal gun-shot wound of the skull.

Dr. Abram and Professor Ernest Glynn showed a specimen of polyposis intestini adenomatosa in a girl, associated with chronic diarrhœa. One portion had developed into columnar cancer with metastases in the liver.

Professor Ernest Glynn showed (1) tuberculosis in the lung of a camel; (2) tuberculosis in the pericardium of an ox; (3) melanoma in the liver of a horse; (4) perihepatitis in a horse; (5) nutmeg liver in a pig.

Dr. Nathan Raw showed (1) a specimen of acute tuberculous pericarditis in an adult aged 30, secondary to miliary tuberculosis of the lungs. During life 40 ounces of fluid were withdrawn by paracentesis, with marked temporary benefit; (2) a lung showing healed tuberculosis in the upper lobe. The man, aged 59, died from acute pneumonia, (but had consumption when 35 years of age and had been quite cured.

Mr. Douglas Crawford showed (1) endothelioma of testicle; (2) foreign body (brooch) from intestine. Cotton wool had been administered, and the brooch had been passed wrapped up in it.

Mr. R. C. Dun showed (1) microscopical section of congenital fibroma of the finger, removed from an infant 9 weeks old. The tumour was the size of a cherry, pedunculated, and grew from the palmar surface of the digit; (2) microscopical section of wall of bronchial cyst. The lining consisted of stratified epithelium, and typical masses of lymphoid tissue were present. The cyst was removed from a boy aged 12 years. It occupied the position of the 2nd bronchial cleft—it was the size of a tangerine orange, and had only been noticed for twelve months.

The specimens were discussed by Mr. Paul, Mr. Douglas Crawford, Professor Ernest Glynn, Mr. Yorke, and Dr. Blair Bell.

Mr. K. W. Monsarrat and Dr. I. J. Williams read a paper on

INTRAMURAL EXTENSION IN RECTAL CANCER.

The paper presented the results of complete histological examination of the specimens derived from four cases of operation for rectal cancer. The specimens were cut in serial sections, and the staining method employed was mucicarmine and hæmatoxylin. It was considered that it was incorrect to look upon mucin as a degeneration product, or its presence indicative of growth ineffective from the point of view of metastases. It was shown in the observations reported that infiltration was widest in the planes of the longitudinal muscular coat and the cellular tissue outside it. No permeation of lymphatic plexuses to a distance beyond the primary site was demonstrated. In particular it was not found that permeation took place in the plane between the bases of the follicles and the muscularis mucosæ.

In one of the specimens it was shown that the growth was present within the venules in the muscular coat and the adventitia. The specimens were representative of the commonest type of rectal cancer—a fibrous stenosing carcinoma. They went to show that the disease remained local for a considerable period, that glandular invasion might be considerably delayed, and that longitudinal extension in the rectum was not rapid and wide, but comparatively slow and restricted. The authors considered that while abdomino-perineal amputation was the operation of choice for carcinoma, resections and amputations less extensive than this procedure offered fair prospects of cure, and that it was, therefore, justifiable to undertake such operations when for any reason a complete amputation appeared to be contraindicated.

Professor Ernest Glynn analysed 50 *post-mortems* on patients who had died from cancer of the large intestine in the Royal Infirmary. The rectum was affected in 20, and the pelvic colon in 10 cases. Metastases other than those in the lymphatic glands in the neighbourhood of growth were present in only 19 cases. 30 died from peritonitis, including cellulitis or abscess formation. In 9 there was acute ulceration of the intestine at some distance from the stricture.

Dr. Blair Bell discussed the frequency with which malignant growths of the rectum invaded the ovarian cysts; and contrariwise he had found ovarian carcinoma sometimes invaded the rectum to such an extent as to make it difficult to decide at operation which was the primary growth. Histological examination usually made this question clear.

Mr. Paul, Mr. Newbolt and Mr. R. W. Murray also spoke. Mr. Monsarrat replied.

CENTRAL MIDWIVES BOARD.

Meeting held Thursday, November 20th, 1913.

The President, Sir Francis Champneys, in the Chair.

Correspondence dealt with included a letter from the Norwegian Charge d'Affaires in London, requesting certain particulars regarding the training of midwifery pupils in the United Kingdom, and asking the Board to furnish a memorandum thereon.

A letter was read from one of the Board's examiners calling attention to the ineffective training of a large number of the candidates for the Board's examination owing to the apparent absence of any system of classes at which questions may be asked and explanations given. It was agreed that the substance of the letter be communicated to all the examiners, with the request that they will give the Board their comments upon it, the writer's name being suppressed and "Examiner" being substituted.

Correspondence with Miss E. V. Pocock, a Queen Charlotte's Hospital district midwife, and with Mrs. S. F. Lineham, a pupil of Miss Pocock, with regard to the refusal of the Secretary to accept the schedule tendered by the latter for the examination of October 23rd, and asking that Mrs. Lineham may be admitted to the examination of December 12th, was considered, and a letter was read from the Secretary of Queen Charlotte's Hospital explaining the circumstances attending the taking of her cases by Mrs. Lineham, and the system of training at the Hospital as regards the period during which cases must be taken. The Board decided (*a*) that Mrs. Lineham should be admitted to the examination of December 12th; (*b*) that the Board's circular of April 18th, 1912, should be sent to all training schools, that with each schedule sent to a candidate a form be enclosed on which should be entered the date of each delivery certified, and that such form be signed by both trainer and candidate as correct. It was further resolved that this regulation be communicated to all training schools and approved teachers and midwives under Rule C 1 (2).

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 22nd, 1913.

Epilepsy.

Dr. Maurice de Fleury, Member of the Académie de Médecine, has a conception of his own as to the exciting cause of epileptic seizures, but which seems to be justified by the facts.

At the International Medical Congress held some months ago in London, M. De Fleury read a paper on the subject that received notice at the time. It may be well, however, to recall the principal features of his method of treating that mysterious affection.

Although inclined to believe that in every epileptic there exist cerebral lesions, important in some, constituting the whole malady, hence the little success obtained from every kind of treatment, he was ready to say that in the greatest number the cerebral lesions are but little marked, producing only a predisposition to the attacks. The exciting cause, on the other hand, comes from irritation of the gastro-intestinal apparatus or the toxic residue of a faulty digestion provoking chemical poisoning of the central nervous system.

All neurologists have remarked the frequency of chronic enteritis in patients suffering from epilepsy, preceded by furred tongue, fœtid breath, constipation alternating with diarrhœa charged with mucosities and membranes. According to the doctrine of Herther and Smith, the exciting cause of epileptic fits is in great part due to intestinal putrefaction from excessive indicanuria.

Confirmed in these views, the author proceeded to suppress in the diet of the patients all the richest nitrogenous foods, including milk and eggs, and prescribed largely lacto-ferments recently introduced into therapeutics.

The results were eminently satisfactory. Of 21 cases of pronounced epilepsy, only two remained unaffected by the treatment. The attacks declined rapidly in frequency, and finally ceased altogether. In many cases no returns have been observed for two and three years; they were consequently pronounced cured.

The *régime* is strictly vegetarian, all foods of animal origin are suppressed: milk, eggs, fish, meat. The diet allowed is minutely defined by the author: farinaceous foods, vegetable soups, fresh vegetables, cooked or raw, salad, fruit, honey, jam, sweets. To this is added abundant diuretic drinks as furnished by one ounce of lactose in a quart of water, to be drunk during the day and particularly between meals, and lactic ferments represented by bouillon preferably to compressed tablets, although these latter may be employed with efficacy, and are more easily obtainable. M. de Fleury gives bromides in all the cases to moderate the hypersensitiveness of the motor zone, but in small doses.

The method requires great minuteness in the application of every detail, and also perseverance on the part of the parents and the patient himself. It is only at that price that a cure can be hoped for.

A young man treated by the writer according to the usual methods without any benefit, was placed by his parents in a large and well-appointed institution for the treatment of epilepsy and kindred affections, but with no better results. On the contrary, the fits seemed to have increased in frequency (seven or eight a week) and acuity; moreover, the mind was more or less affected perhaps by bromism. Two months ago he was brough to Dr. de Fleury, who put him at once under the treatment he advocates. The results were not slow to manifest themselves. The seizures ceased, and have not returned up to date. Naturally, the time is too short for drawing a conclusion in this individual case; it is, to say the least, very hopeful.

OXYGEN BY THE RECTUM.

Enemas of oxygen gas have the same indications as hypodermic injections. They may be employed in all cases of mechanical asphyxia and toxic affections met in médical practice.

Thus absorbed, oxygen raises the general condition of the patient and aids in the rapid combustion of the toxins in the intestines. The enemas do not, it is true, possess the rapidity of action of the hypodermic method, but they disinfect the large intestine, an advantage easily recognised.

In entero-colitis, acute or chronic, oxygen gas gives good results; the fœtid odour disappears and the diarrhœa is rapidly attenuated.

The manner of giving the enema is simple. The intestine is first evacuated by a purgative enema, then the gas is injected by means of a soft catheter adjusted to the oxygen bag, and introduced as far as possible into the rectum. The patient is lying on his back, the bag is gently compressed until the colon is filled with the gas, which can be verified by the eye and by palpation. About 2 litres are thus introduced; its absorption is very rapid and completed in about two hours. The enemas may be repeated twice or three times a day.

GERMANY.

Berlin, Nov. 22nd, 1913.

At the Gynæcologische Gesellschaft, Hr. Siegwart showed a ii.-para, æt. 22, who had been delivered spontaneously of twins. Some portions of the placenta were removed manually, after which the uterus was washed out. Soon after this the temperature rose and all the symptoms of pyæmia presented themselves. Streptococci also were found in the blood. The condition underwent many changes, but with every further rise of temperature still more germs were found in the blood in increasing numbers. From the sixteenth day rigors made their appearance, and these increased so much in severity that at last it was decided to open the abdomen. Even before this was decided on a band of thickening had been felt in the right parametrium. On opening the abdomen a large thrombus was found in the right spermatic vein. The vein was followed up to its entrance into the vena cava, and there a ligature was placed around it. From that time there were no more rigors, but only slight rises of temperature due to bed sores. The blood remained free from germs, as it always had been when the temperature was but slightly raised.

Hr. Warneckrose had seen some hundreds of cases in which bacteria were found in the blood with rises of temperature; he considered that in such cases where the numbers of germs were increasing the patient was always lost, but for timely operation.

Hr. Mainzer would avoid touching the interior of the uterus. He would like to learn the views of others on that point.

Hr. Koblank would not have been satisfied with ligature of the vein only, he would have removed it altogether. He had never seen peritonitis follow when that had been done.

Hr. v. Bardeleben had ascertained that the walls of the vein were the best protection against the spread of streptococci; he was quite content with ligatures only.

Hr. Fromme had never made up his mind to ligature a vein; the operation was a serious one, and the results were doubtful. Above all, the indications were not sufficiently precise. There was not sufficient proof in the case before them that the patient would have died without the operation. He held that the result was purely accidental.

Hr. Strassmann was of opinion that it had not been necessary to go into the uterus, that had been a mistake.

Hr. Bumm, the President, said that the bacteriological condition was the decisive factor; the temperature was only of value when considered along with that, and then only when the streptococci were increasing in numbers. Cases that were clinically alike were often quite different bacteriologically.

Hr. Brande showed a uterus with a large perforation opening that had been made with forceps. Not only was the uterus torn, but the vermiform appendix had been seized and torn off and the small intestine injured in four places. In spite of all these injuries, after resection of the appendix, careful suture of the torn bowel and extirpation of the uterus, the patient made an uneventful recovery.

Hr. Sussmann read a paper on what he called the

INCLUSION BLENNORRHŒA OF INFANTS.

He said that in blennorrhœa of infants gonococci were found in not more than half of the cases. Up to the present no uniform ætiology was known in respect of the other half. This lacuna had been filled by the so-called "inclusion blennorrhœa." In the epithelial cells there were included certain bodies that sat caplike on the nucleus of the cell, such as were seen in trachoma. From the staining and the different stages one could see that these bodies grew and that therefore they formed a living virus. Originally they were granules embedded in the protoplasm, which at first were coloured blue, but as the isolated granules grew they became red in colour. These bodies were present also in the secretions of the mother. This inclusion blennorrhœa was present everywhere where there was trachoma, over the whole earth. Half of the blennorrhœas were inclusion blennorrhœas; mixed infections were rare, but they did occur. Experiments had already been made on animals with a positive result. Similar effects had been caused both when the secretion had been taken from the mother and from the urethra of the father. Only the anthropoid apes were susceptible, and where blennorrhœa had been set up there had never been any implication of the cornea. The longer incubation period sufficed to distinguish this form of blennorrhea from the gonococcal. This also explained the occurrence of late attacks. The secretion was not so thick and yellow as in the gonorrhœal form of the disease. It appeared to the speaker that they were on the eve of the discovery of a disease similar to gonorrhœa, and one that had been often mistaken for it.

AUSTRIA.

Vienna, Nov. 22nd, 1913.

The Genesis and Therapeutics of Diabetes Mellitus.

The subject of diabetes mellitus continues to form a focus of very active discussion. At the recent meeting of the K.k. Gesellschaft der Aertzte in Vienna it was again introduced by Dr. W. Falta in a communication on the "theory and treatment" of this interesting clinical condition. He pointed out that there are two queries which specially require to be answered by those engaged in investigation of respiratory metabolism in diabetic patients: (1) Does the consumptive character of grave diabetes depend on an increased heat production, as sometimes is the case in Basedow's disease? To this query Dr. Falta replies in the negative. There is no increase of carbonic acid production or of heat production; but the intake of oxygen is raised in amount on account of the expenditure of substances very rich in oxygen and caloric (sugar and ketone) bodies. We can speak of a consumptive character in those cases only in which the diabetic patient fails to compensate for the waste of caloric in the urine by a corresponding increase in the introduction of nutriment. (2) Can we decide by means of research regarding the respiratory phenomena whether the derangement of metabolism depends on an increased production of sugar, or on a derangement of the combustion of sugar and corresponding assimilation? The former view is supported by Claude Bernard, O. Löwi, O. Porges, and van Noorden, among others; while the latter is favoured by the Naunyn school, and especially by Minkowski. Dr. Falta had, from the results of the researches carried out in association with various co-workers, arrived at the conclusion that the most important lesion in diabetes mellitus is one of the combustion of sugar, in connection with its assimilation; but that there is besides an associated and relatively contingent one present, in the form of a primary over-production of sugar. The assimilative lesion depends on a functional insufficiency of the pancreatic island apparatus: the dissimilatory one on an increased stimulation of certain sympathetic centres, and the functional hyper-activity of the chromaffine tissues thereby elicited. The very low respiratory quotient in grave cases of diabetes mellitus does not contribute to the elucidation of this question, inasmuch as with an enormously increased over-production of sugar in the liver, and copious formation of ketone bodies, the respiratory quotient must be greatly lowered, even when the sugar is consumed exclusively in the rest of the tissues. (Van Noorden.)

But Dr. Falta pointed out that the respiratory quotient indicated a moment in the course of carbohydrate metabolism in which the circulation is overloaded with sugar. In regard to those conditions, the researches which he had himself carried out in connection with Dr. Bernstein gave the following results:—(1) A diet rich in carbohydrates brought about a conspicuous elevation of the respiratory quotient. (2) Intravenous injection of sugar solution likewise raised the respiratory quotient. Generally speaking, then, no sugar need be excreted under these circumstances. (3) The same occurs when the glycogen deposit which is present in the body is mobilised by the administration of adrenalin. The normal organism also possesses the power of rapidly lowering the proportion of sugar in the blood to the normal level of combustion, when the circulation has become flooded by it, and thus preventing any excretory waste of the same. This process of combustion was, apparently, preceded by polymerisation of the sugar—a process to which the author gives the name of glyco-metabolism. He now showed that little or no increase of the respiratory quotient occurs in diabetic patients under those circumstances, and he draws from this fact the conclusion that in the diabetic this faculty of glyco-metabolism has failed more or less completely according to the degree of the functional lesion. This derangement of glyco-metabolism does not completely coincide with that of glyco-genesis, as the former process may remain well in evidence after the latter function has failed. In grave cases, however, both lesions are invariably present.

This view also to some extent gives a clear explanation of the course of events in the carbohydrate cure. According to the researches recently carried out by the author in collaboration with Steinberg, we can utilise in the carbohydrate cure, not only oatmeal, wheatmeal, beanmeal, peameal, bananameal, etc. (van Noorden, L. Blum), but also rice, groats, potatoes and tapioca. In fact, we may combine the various cereals in any way we choose, and with like results. By adoption of a diet consisting exclusively of cereals, the process of glycogen formation is made extremely easy to the organism; as a result of which we find that, in the normal individual, the respiratory quotient begins to show a significant increase only after a whole day's administration; while with a mixed diet, and especially one with a large proportion of meat, in agreement with the results of L. Blum's researches, the formation of glycogen takes place only in very small proportion. In the first case there is very little demand in the function of glyco-metabolism, and an overflow of sugar into the circulation occurs much later. It thus succeeds in filling up again the glycogen depôts more or less completely, and thereby stunting, or at least repressing, the process of formation of ketone bodies.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

The Medical Guild—Opposition to the Panel.

A large and very successful gathering of medical men, who are not on the panel and are opposed to the principles of service under the Act, was held in the Hall of the Royal College of Physicians, Edinburgh, on November 15th. Dr. John Playfair, President of the Guild, was in the chair, and there were present, in addition to the local members, delegates from London and Manchester. The Medical Guild was founded early in the year, at the time panels were being formed, by the practitioners who were resolved at all costs to remain independent. The business before the meeting was a resolution to the effect that the Guild would federate with all associations holding a similar policy to its own—viz., the maintenance of the honour and freedom of the medical profession, and uncompromising opposition to the method of administration of the medical benefits of the Act. Professor Russell, who proposed this resolution, said that while the members of the Guild had been able to refrain from going on the panel they knew that among those who had been forced by economic causes to serve they had many warm sympathisers. Besides maintaining the honour, they wished to maintain the freedom of the profession, and that included the freedom of the public which under the Act had practically been abolished. He pointed to the alteration which the Act made in the relations of employer and employed of certain classes in the matter of the former caring for the latter in sickness. That was one of the great altruistic developments of our time, and any measure which tended to destroy it was unchristian in its foundation. Under the Act, he asked, were members of friendly societies, colliers, and those under terms of ordinary practice, any better attended than formerly? The very poor dependent on charity for medical attendance were really not benefited—as they would have been under a truly philanthropic Act. The Act was wrong in principle, and an injustice to doctors and patients. He proposed to bring about a closer alliance between the Guild and other bodies holding similar views, and such co-operation made no reflection on other people. Possibly if a Unionist Government came into power it would seriously attempt to remedy the Act in the direction of giving insured persons greater freedom. The resolution was unanimously adopted after speeches by Dr. Jas. Carmichael, Edinburgh; Dr. Monson, London;

Dr. Wheeler Hart, Manchester; and Dr. Green, Wandsworth. Dr. Hart quoted the Bill of Rights to show that the Act had deprived medical men of their rights as citizens. Dr. Green, Wandsworth, said that the report published that at December 31st last there were 2,000 doctors on the London panel was false. He did not believe that the panel membership in London exceeded 1,200, out of 6,300 doctors. The majority were not on the panel, and if 8,000 or 10,000 stood out the Act was bound to fail. Some dissatisfaction was also expressed at the British Medical Association, which was described as antiquated machinery, deserving of being broken up. A very successful dinner of the Guild and its friends was held in the evening.

Revision of Medical Benefit Regulations.

The Scottish Commissioners have issued a memorandum dealing with revision of the benefit in the year beginning January 12th, 1914. Owing to changes of address among the insured it is doubtful whether the register at any time represents the personnel of the insured population with sufficient accuracy to allow of personal allocation within a reasonable time. Under the new regulations the position will be broadly as follows:—Upon permanent or semi-permanent removal insured persons can make a fresh choice of the method by which they will receive medical benefit in their new place of residence. Upon temporary removal all persons may elect to be treated either by a panel doctor or an approved institution, but on returning to their original residence they revert to the arrangement originally made. Persons making their own arrangements will on permanent removal be obliged to make a fresh choice of method; during temporary absences from home they will be able to obtain treatment at their own expense and apply for a contribution from the Committee by whom permission has been granted. Clauses 13 and 14 of the doctors' agreement have been so altered as to obviate the need for appeal to the courts in disputes between doctor and Insurance Committee. They have also been altered to meet the difficulties which are experienced by Insurance Committees in dealing with breaches of the agreement which are either too grave or not sufficiently grave for the remedies provided. Transference of insured persons is inadequate to meet the case of a doctor who leaves his practice without notice or providing a deputy. Even removal from the panel is fruitless in the case of a doctor who has already removed himself from the panel. Gross neglect appears to require action further than transference of the patient or removal of the doctor from the panel, and to meet such cases provision has been made for the recovery of damages under the agreement, and for empowering the committees to refund to the insured person out of the moneys recovered or retained the expenses reasonably and necessarily incurred in obtaining treatment owing to the doctor's neglect.

Glasgow University Assessorship.

Dr. James A. Adams set a difficult task before him when he attempted to oust from his seat in the University Court one of the assessors of the General Council whose term of office had expired; and it is not surprising that he did not succeed. Both of these assessors had a strong hold on the electorate, and it would have required very important differences in policy between them and the new candidate to give the latter a chance. Such differences did not exist. Dr. Adams obtained support from the medical profession, but would have obtained more of such support had he been more prompt and explicit in stating his opposition to the inclusive fee in medicine. When the day for counting the votes came it was found that the votes were:—For Dr. John Hutchison, 3,645; for the Rev. Dr. John Smith, 2,919; and for Dr. Adams, 1,654.

BELFAST.

Queen's University, Belfast.

The late Mr. Wm. Gibson, of Donegall Place, Belfast and Regent Street, London, has left a legacy of £10,000 free of legacy duty, for the purpose of founding certain scholarships in connection with the University to be called "Gibson Scholarships." Mr. Gibson some years ago exhibited his interest in the then newly created University by presenting it with a magnificent and unique silver mace, which has since been used on ceremonial occasions. This valuable legacy is a further proof of Mr. Gibson's interest in the University of the city, of which he was a highly esteemed citizen and successful merchant, and will be the means of helping forward on their educational journey as many as possible of the promising youth of his native province. Of late the authorities of the Queen's University have been gratified to notice how many of the county councils have taken advantage of the excellent clause of the Irish Universities Act, 1908, which empowers them to found scholarships tenable in the University, and the number of such county councils is still growing.

British Medical Association, Ulster Branch.

The autumn meeting of this branch was held in Belfast on Thursday, November 13th, Dr. John Campbell, President, in the chair. The newly elected President, Dr. Lawless, of Armagh, was installed, and a hearty vote of thanks was accorded to the out-going President for his services during his term of office. Dr. Lawless chose for the subject of his inaugural address "The Increase of Lunacy," and dwelt on the various causes for the real and apparent increase of insanity in the three kingdoms. Dr. Warnock, of Donegal, proposed, and Dr. Wm. Calwell, of Belfast, seconded a vote of thanks to Dr. Lawless for his valuable and suggestive address. The vote was passed by acclamation. Professor Lindsay read notes of a case of Landry's paralysis, and in the discussion which followed Dr. Calwell referred to a case in which he had been interested. Dr. W. J. Wilson read a paper on "A Brilliant Green Bile Salt Solid Medium for the Isolation of Bacillus Typhosus." Mr. Howard Stevenson read a communication on "Torsion of the Omentum, with Notes of Two Cases." Mr. T. S. Kirk read a note on "A Common Cause of Movable Right Kidney, and of Stasis in the Ascending Colon." The paper was discussed by Mr. Fullerton and Mr. Crymble. Dr. Coyle gave a demonstration of an Apparatus for the Treatment of Pulmonary Tuberculosis.

Royal Victoria Hospital.

An electro-cardiograph has just been installed in the Royal Victoria Hospital. Dr. McIlwaine, Assistant Physician to the Hospital, gave a demonstration to a large number of members of the profession on the 13th inst. It is proposed also to instal a a new and up-to-date X-ray apparatus in the Royal Victoria Hospital, the existing one now being somewhat out of date. A recent legacy has made it possible to spend a considerable sum of money for this purpose.

Ulster Medical Society.

The Annual Dinner of the above society was held in the Medical Institute on Thursday, 13th inst., Mr. A. B. Mitchell, President, occupying the chair. A very large number of members and visitors were present, as two events of much interest to the profession were to take place. A memorial portrait to the late Dr. Joseph Nelson was unveiled by Mr. J. Walton Browne, D.L. Mr. Browne, in an eloquent speech, referred in feeling terms to the esteem and respect with which the late Dr. Nelson was regarded by everyone who had the pleasure of knowing him. Dr. Nelson, who occupied for many years the post of Ophthalmic Surgeon to the Royal Victoria Hospital and the Belfast Hospital for Sick Children, was a former president of the Society, and took a leading part in building up the Belfast Medical School. The portrait is an excellent one, and will be much admired by Dr. Nelson's old pupils and friends. The honorary Fellowship of the Society was presented to Mr. J. Walton Browne by the President, who referred to the long and faithful services rendered by the former to the Society, the Medical School, and the public of Belfast and the province of Ulster. The toast of "Irish Medicine" was proposed by Professor Lindsay in a speech worthy of the subject. This was responded to by the President of the Royal

College of Physicians, Dr. Fitzgerald, and the President of the Royal College of Surgeons, Mr. Purefoy. Mr. R. J. Johnstone proposed the toast of the visitors, which was responded to by the Recorder of Belfast and Dr. Lawless. The toast of the President was proposed by Sir Thomas Myles, of Dublin, and responded to by the President, who proposed the toast of the Secretary, Mr. S. T. Irwin. The function was one of the most successful in the annals of the Ulster Medical Society.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

SMALLPOX AND VACCINATION.

To the Editor of The Medical Press and Circular.

Sir,—To one who takes no orthodox view about vaccination the review of Dr. Hanna's book in your issue of the 19th inst. is distinctly encouraging. I am old enough to remember a considerable change of public opinion on this question, and you, Sir, will no doubt also recollect that the late Mr. Ernest Hart in the early days was very outspoken about the anti-vaccinist class, whom he stigmatised as guilty of "crimes against humanity," and whom he would have punished as malefactors. By the time the Royal Commission had begun to get to work Mr. Hart referred to the "few noisy and uninformed persons" who "wickedly" and "senselessly" preached the doctrine of anti-vaccination, but that "such learned gentlemen as Mr. Hopwood, Q.C., M.P., were, of course, fully entitled to hold and preach their political doctrines of non-compulsion as a theoretic creed." Later still, at the time of the Gloucester epidemic, anti-vaccinators were no longer "criminal," or "wicked," but "ignorant fanatics," and now I notice your reviewer only uses the rather harmless term "faddists," but with "wiles" of "much skill and ingenuity," which is rather complimentary, at any rate, to their intelligence, and he thinks that really a good deal of the blame ought to be laid at the door of the medical profession, who obstinately decline to educate the public, and with this we shall all cordially agree.

But when your reviewer, in a much limited space, commences to deal with figures, does he not rather overestimate the small-pox mortality of the 18th century? It may well be that high figures may be on record for hospitals, but 25 to 40 per cent., I should say, were exceptional rather than average numbers. It is true that in recent years there has been a marked reduction, but a much more likely explanation is that this has been occasioned by improved sanitary measures and by the more rational methods of nursing of which Florence Nightingale was the pioneer. I say this because Dr. Hanna's fatality for the last ten years at Liverpool is 7.6 per cent. (1,163 cases and 88 deaths), whereas I find that the statistics for Leicester are still lower—viz., in the epidemic of 1892-1894, just 5.9 per cent. (355 cases and 21 deaths), while the proportion of those attacked by small-pox who were vaccinated in Liverpool and Leicester respectively was 81 per cent., and 55.6 per cent., thus indicating that Liverpool was better "protected." Does not this tend to show that some factor or factors other than vaccination have been at work? although, of course, I fully admit that your reviewer, in trying to compress the whole case for vaccination in a few lines, did himself very inadequate justice for the elucidation of so difficult a problem.

I am, Sir, yours truly,
W. Scott Tebb, M.D.Cantab.

London.
November 21st, 1913.

POSTERIOR RHINOSCOPY.

To the Editor of The Medical Press and Circular.

Sir,—I read with interest Dr. William Lloyd's "Note on a new Posterior Rhinoscope," published in yesterday's Medical Press and Circular, though I do not agree with the title "new." If Dr. William Lloyd will refer to Volume 11, "Selected Monographs," published by the New Sydenham Society in 1861, he will find (pages 26 and 27) the description and illustration of a post-rhinoscope designed by Czermak, which to all intents and purposes is identical with that of Dr. Lloyd. Further the method of illumination by means of a Bruning's handle is not new, as it has been used and described by Von Gyergyai in 1910 and 1913 (for full references see *Deutsch. Medizin. Wochenschrift*, No. 25, 1913), and was demonstrated by him at the recent International Congress of Medicine. The method of retracting the palate by means of rubber tubing to permit of the introduction of the instrument and examination of the post-nasal space seems to me to be an unnecessarily severe and complicated procedure for routine examination purposes, especially when an easy, accurate and painless examination can be made with the naso-pharyngoscope (Holme's method, see the writer's paper on "The Direct Examination of the Eustachian Tubes and Nasopharynx," *Journal of Laryngology*, November, 1913).

Dr. Joseph C. Beck, of Chicago, has described a new method for the removal of adenoids under direct inspection, in which the palate is retracted by means of a rubber catheter passd through the nose (*Annals of Otology*, Vol. 22, June, 1913), but this method of palate retraction is not new, and has long been used by surgeons when operating upon the post-nasal space.

I am, Sir, yours truly,
J. Walker Wood.

30 Canfield Gardens, Hampstead.
November 20th, 1913.

LONDON MEDICAL COMMITTEE.

To the Editor of The Medical Press and Circular.

Sir,—Will you kindly insert the following report of the meeting of the London Medical Committee of November 17th in your paper, and oblige?

I am, Sir, yours truly,
E. Arthur Dorrell.

45 Welbeck Street, W.
November 18th, 1913.

At a meeting of the London Medical Committee (non-panel) on November 17th, notice was received of a non-panel association for Deptford. Dr. Greene, who had just returned from a meeting of non-panel men in Edinburgh, reported that over 40 per cent. of the doctors in Edinburgh had not joined the panel, and that 400 in Glasgow had not gone on.

With reference to a recent attempt to work a scheme to pass all persons suffering from tuberculosis through the voluntary hospitals, to be there examined and allocated to dispensaries or sanatoria, the following resolutions were passed by the Committee:—

(1) That the London Medical Committee, while recognising that there is a place for the co-operation of sanatoria and hospitals in the treatment of tuberculosis, is strongly of opinion that the domiciliary treatment of tuberculous persons, as well as that carried out in local dispensaries, ought to be entrusted, to the fullest possible extent, to practitioners engaged in general practice.

(2) That this Committee is of opinion that the voluntary hospitals to which medical schools are attached should have the opportunity of having all the clinical material they need for teaching purposes.

(3) That in the opinion of this Committee the acceptance of payment out of public funds for special treatment in a voluntary hospital is contrary to the interests of the public and the profession.

(4) That the Council of the British Medical Association be requested to forward forthwith the subjoined resolutions to the various Divisions for the earliest possible expression of opinion by them.

On the question of the unallocated medical benefit insurance funds the Committee passed the following resolution:—"That the Committee suggests to the Non-panel Committee of the Council of the British Medical Association that they should endeavour to obtain an injunction against the London Insurance Committee distributing the medical benefit of the unallocated insured persons among the practitioners on the panel."

THE PANEL SYSTEM AND ITS ANOMALIES.

To the Editor of The Medical Press and Circular

Sir,—Only a month ago I was grumbling at your statement that medical men received a windfall from the Insurance Act. I now congratulate you that you have adopted a somewhat different tone. In the article headed "What of Wisbech?" you say the Chancellor "left the profession for the time being more or less discomfited," and remark that "it is hardly likely that any large section of educated Englishmen will allow themselves to be exploited." This is only what one would expect from an independent journal like the Medical Press, not in fear of resignations nor of what a German doctor calls the Judas-like defection of colleagues and neighbours. Even now, if I may say so, you only nibble at the "mint and cumin," and neglect the serious and most substantial matters. Herbalists, faith healers, Christian Scientists, etc., do the profession comparatively but little damage, although it may be annoying and derogatory to find their certificates accepted (if they are) in cases of illness. But the great loss to the medical profession is that panel doctors have to give certificates free of charge to all approved societies. You have not a word of criticism or guidance as to the draft agreement, the second paragraph of which makes it an offence to receive any remuneration for extra attendance.

I might mention many cases where attendance is given not for health but for appearance, but I will mention a case of treatment. A young fellow, whose father makes between three and four thousand a year, has to be insured because he only earns about £2 a week in an office. He got pneumonia, and the father came to me and said, "See here, doctor, I wish my boy to get the best attention. I can't expect you to visit him three or four times a day for the panel pay, but pay as many visits as you think necessary and charge to me." Was I doing a dishonourable thing in giving my best attention at the crisis and charging the father for it? I do not think so. But under the draft agreement I could not do so. Is it not possible for you to get from some of those who have had large panel practices a statement of the amount of work they have had to do and the remuneration for such services? You have ridiculed the threepenny doctor, but from my experience, taking what I have received in payment and the work done, my remuneration has not much exceeded that of the threepenny doctor, and there is this to be said for him—he keeps his liberty. Mr. Churchill has made a statement of the number of visits and attendances made by doctors, but as we all know that as the cards giving such statistics are still in our possession the statement is a mere guess. This is dishonourable.

I am, Sir, yours truly,
London, S.W. An Old Radical.
November 22nd, 1913.

THE FUTURE OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of The Medical Press and Circular.

Sir,—The deep interest which you take in the welfare of every practitioner encourages me to ask you to take up especially the question of the "Future of the Royal College of Surgeons" of England.

The time has now come when the matter must be faced resolutely and definitely as to what is best to be done to bring the administration of the College up to modern requirements.

We all recognise to-day that the Reformation was a sad thing in the Church, and that the Revolution was an evil remedy in the history of France, but we must all of us have come to the conclusion that both these remedies were forced upon unwilling people because constitutional remedies were refused them.

For nearly twenty years the Members of the College of Surgeons have mildly, politely and constitutionally pointed out every year to the Council that it was only fair and right that they should have a voice in the Corporation of which they constitute the greater part in numbers, and provide the greater part in income. Secure in the safety of a Charter, the Council have entirely ignored these polite and just requests.

There remains, therefore, now nothing but stronger remedies, and since at the annual meeting last week almost the whole business consisted in Fellows and Members uniting unanimously in condemning the administration, the finances, the lack of initiative, and the neglect of the welfare of the members of the Corporation by the Council, it is time that steps were taken to put an end to such anomaly.

Corporations which have outgrown their Charters must have new ones; a living body must not have its growth hindered by the dead hand of bygone years. The Charters of the past suited the past, but are unsuited to the present, and therefore I venture to ask you to find space in which I may appeal to every Fellow and Member of the Royal College of Surgeons to unite in appealing to the Privy Council for an alteration of the Charter of the Royal College of Surgeons, so that some representation and some rights of administration should be given to the seventeen thousand M.R.C.S.'s, instead of being, as at present, restricted to the less than two thousand F.R.C.S.'s.

I am, Sir, yours truly,
Josiah Oldfield, D.C.L.Oxon, M.R.C.S.
1 Mitre Court Buildings, Temple, E.C.
November 24th, 1913.

SPECIAL REPORTS.

ROYAL COMMISSION ON VENEREAL DISEASES.

At the third meeting of the Royal Commission on Venereal Diseases, held on November 13th, Dr. R. W. Johnstone, Medical Inspector of the Local Government Board, gave evidence which followed generally the lines of the report on venereal diseases written by him and issued by the Local Government Board in August last.

He found much difficulty in arriving at a conclusion on the question of the prevalence of the diseases in the population. The figures given by the Registrar-General could not be relied upon for information of the number of deaths from venereal disease, and this was inevitable owing to the reluctance of medical practitioners to certify deaths as due to this cause. The death-rates from a number of diseases known to be caused by syphilis, instead of showing a decrease, as would be expected if syphilis were diminishing, were stationary or tended to increase. The figures relating to venereal diseases in the Army showed remarkable decreases, but were subject to some qualifications, and in any case could hardly be taken as an exact reflection of the state of the civil population. Men in the Army, through the instruction given by their officers, were much better educated with regard to these diseases than the ordinary civilian.

For the purpose of obtaining trustworthy statistics of the prevalence of these diseases, he thought that certification of deaths should be confidential, but that this change should be made with regard to all diseases and not only venereal diseases. He was of opinion that information of value might be gained if a special return were obtained from general hospitals.

As to notification, he said that he was opposed to the introduction of any compulsory system. He understood that there was a possibility of a system accompanied by the names of patients being put in force in one of the Scandinavian countries; but treatment by quacks did not flourish there to the same extent as in England, and he thought that there was not the same danger of notification leading to the concealment of the disease. From the point of view of the public health of the country in relation to venereal diseases, the objects of primary importance to be secured were the prompt recognition of the diseases and their early treatment. To this end he advocated that facilities for laboratory diagnosis should be provided, and that the available hospital accommodation, which at the present time was entirely inadequate, should be supplemented. He was not in favour of the erection of additional special hospitals to deal with these diseases, as he was anxious to avoid anything which would tend to have a deterrent effect. He was of opinion that the more the general hospitals could be used the more freely patients would present themselves for treatment.

Dr. Johnstone pleaded for greater frankness on the part of the public with regard to these diseases. If the public were properly educated in the matter and the necessary facilities for treatment were provided, there was now an opportunity of reducing the diseases to very small dimensions.

On November 17th statistical evidence as to the prevalence of venereal diseases in the Army was given by Lieut.-Col. Scott, Deputy Assistant Director-General of the Army Medical Department. The figures furnished by Col. Scott were for the period from 1888 to 1912, and related to the rejections of recruits on account of venereal disease, the admissions to hospital, the numbers constantly sick, and the numbers invalided from the Service from this cause. Under all these heads remarkable reductions were shown. The rejections on recruiting had fallen from .63 per cent. of the candidates in 1890 to .14 per cent. of those presenting themselves in 1912. The admissions to hospital in the United Kingdom, which stood at 224.5 per 1,000 of the forces in 1888, had dropped to 56.5 in 1912. There were corresponding falls in the figures of constantly sick and invalids. In the case of India the reductions had been still more marked.

Col. Scott showed that certain qualifications have to be borne in mind in comparing the earlier with the later years, but he was satisfied that real progress had been made and that the figures did indicate a large measure of success in dealing with the diseases in the Army. He was not prepared to say whether the figures indicated a corresponding improvement in the civil population.

MEDICAL NEWS IN BRIEF.

Asylum Medical Officers.

A conference of assistant medical officers of public asylums, held at Birmingham last week, decided to form an association for the protection of the interests of the profession. At the present time, it was stated, assistant medical officers were subjected to many disabilities. Asylums could not get assistant medical officers because young medical practitioners recognised that if they went into asylum service they might not be allowed to get married, or if they did so they might be required to live apart from their wives.

Further, it was found that after several years' experience as assistant medical officer in a public asylum the salary was no more than that of a man who had only just qualified. It was not unusual, it was stated, for an assistant desiring to attend a meeting to be refused permission by his superintendent. Circulars inviting attendance at the conference were sent to assistants at 35 Midland asylums, and all but six sent representatives or letters of sympathy with the objects of the meeting.

Treatment by Christian Science.

An inquest was held at Chelsea on Monday last on the body of Mary Ann Thrower, 66, of Basil Mansions, Basil Street, Chelsea.

Captain Braithwaite, of Basil Mansions, said the woman had been a trusted servant of the family for over forty years. She was a Christian Scientist, and had been in the habit of visiting a Mrs. Rennie, also a Christian Scientist. On Thursday afternoon Thrower fainted, and the witness telephoned for Dr. Furber, the family medical attendant. When Thrower recovered consciousness she asked for Mrs. Rennie to be called, and the latter arrived before the doctor. The witness asked Mrs. Rennie to persuade Thrower to see a doctor, and Mrs. Rennie agreed that it was the best course to take. Dr. Furber subsequently prescribed for the woman, who took the medicine. On Friday morning Dr. Furber was again sent for, but the woman died.

Dr. Furber, of Welbeck Street, W., said the woman appeared to be suffering from internal hæmorrhage, set up by an ulcer in the stomach.

Marie Rennie, wife of an engineer, of Elveston Place, Kensington, said she was a Christian Scientist and professed to heal sickness and disease. She had known Thrower about three years, the latter having called at an office in Alfred Place, which was used by the witness and other Christian Scientists for consultations. Thrower complained of pains from indigestion, and came at long intervals for treatment. She always said she felt better after the treatment, which consisted solely of prayer. If the woman had got worse the witness would not have stood in the way of her seeing a doctor.

Dr. Spilsbury, of St. Mary's Hospital, said the cause of death was hæmorrhage, set up by a large ulcer in the stomach. If the ulcer had been treated by medicine and dieting in its earlier stages its progress might have been arrested.

The jury returned a verdict in accordance with the medical evidence, adding that death was accelerated by the want of proper medical attendance. They also expressed the opinion that such persons as Mrs. Rennie should not be allowed to practise as professional healers.

The Coroner said he hoped it would act as a warning to such persons.

Control of Massage Houses.

It is reported that the London County Council will seek powers in the next Session of Parliament enabling them to require the registration of premises used as nursing homes, or for massage, manicure, electrical treatment, and similar purposes. The Bill is apparently to be of very wide scope, and a register is to be kept of all except specially exempted institutions. One of the provisions is thus outlined:—

"It shall be an offence for any person or company knowingly to advertise, or print, or publish an advertisement of any owner or occupier who has been struck off the register."

It is also to be provided that:—

"In any case in which a business not included in paragraph (i.) above is advertised, and the registration authority has reason to believe that the title of such business has been adopted as a cloak to the carrying on of a disorderly house, officers appointed by the registration authority shall have a special right of entry, subject to such regulations as may be made by the registration authority, into the premises concerned, and the registration authority shall be empowered to institute legal proceedings, if necessary, as a result of the inspection of the premises."

The charge for registration of premises is not to exceed two guineas. The penalties for breach of the law range up to £50, with a daily penalty of £20, and imprisonment after the first conviction.

University of London.

The following have passed the third (M.B., B.S.) examination for medical degrees for internal and external students:—

Honours.—H. J. O. Ewing (*a*, *e*, University Medal), H. L. H. Greer (*e*), A. E. Hallinan (*b*), L. M. Ladell (*a*), A. C. Palmer (*e*), C. E. Thornton (*a*). (*a*) Distinguished in Medicine. (*b*) Distinguished in Pathology. (*e*) Distinguished in Midwifery and Diseases of Women.

Pass.—J. Appleyard, C. H. Attenborough, Margaret M. Basden, A. C. L. O'S. Bilderbeck, G. F. Bradley, A. J. Clarke, R. J. Clausen, F. W. T. Clemens, J. A. Cowan, J. M. Curé, J. P. Davies, R. D. Davy, S. F. Dudley, W. H. Eggar, Pattie R. Elliott, A. S. Erulkar, D. M. Gibson, C. E. A. Goddard, C. F. Hacker, C. C. Harrison, G. M. Heiron, P. H. Henson, M. Hocken, T. H. Holroyd, J. M. Joly, W. H. Jones, T. P. Kilner, W. Leslie, Muriel A. Lloyd, Margaret J. McEnery, G. Matthews, H. B. Parker, Hilda M. Pollard, W. J. A. Quine, H. M. Rashbrook, A. E. Roberts, A. D. Rope, D. Ross, A. L. Shearwood, H. Smith, E. N. Snowden, E. S. Sowerby, J. Vaughan-James, H. B. Walker, E. W. Whiting, G. Whittington.

Dr. J. Edward Squire, C.B., F.R.C.P., who for the last thirty years has been associated with the Mount Vernon Hospital as an Assistant Physician and a Physician, has been elected a Consulting Physician to the Hospital.

Summary of Recent Medical Literature English and Foreign.

Specially compiled for The Medical Press and Circular.

Cerebral Syphilis.—Henderson (*Amer. Journ. of Insanity*, October, 1913) records the result of a clinical analysis of twenty-six cases of cerebral syphilis, seven of which came to *post-mortem* examination. He comes to the conclusion that syphilis plays an important part in the production of mental disease, more so even than has heretofore been suspected, though trauma, alcoholism, and physical and mental strain are important contributory factors. From an anatomical point of view, three main types of the disease can be differentiated—meningitis, endarteritis and gumma—but clinically this differentiation is not always possible, and is not of great practical value. The majority of cases of cerebral syphilis develop within the first three years after primary infection, and cases occurring ten years after infection are rare. This is in striking contrast with cases of locomotor ataxia, in which a later development is the rule. With regard to the physical signs, Henderson lays most stress on the Argyll-Robertson phenomenon, which he states is rarely present in cerebral syphilis. Other important features are an acute onset with headache, dizziness and vomiting, cranial nerve palsies, convulsions without loss of consciousness, but followed by permanent focal symptoms, the maintenance of intactness of speech and writing, and the absence of facial tremor. Six of the patients whose cases are recorded presented symptoms of pseudo-bulbar paralysis. Recent statistics confirm the opinion that the prognosis in cerebral syphilis, as compared with other organic affections of the nervous system, is relatively good; the most favourable are those which develop soon after the primary infection, and those of the meningitic or gummatous type. Mercury, given systematically, remains the most valuable drug in the treatment of the disease, but the best results known are obtained by combining the mercurial with the salvarsan treatment. K.

The Heart in Syphilis.—Brooks (*Amer. Journ of the Med. Sciences*, October, 1913) finds that serious involvement of the heart is frequent in syphilis. The epicardium, the endocardium, or the myocardium, or all together may be so diseased. The cardiac involvement may develop early in the infection, though its symptoms may not be apparent till late. The signs and symptoms when they appear are those of cardiac disorder, and there is little or nothing except the history, the general aspect of the patient, and the Wassermann reaction to indicate the true ætiology of the condition. Treatment should first be directed towards the improvement of the circulatory trouble; and, secondarily, though most productive and important of all, it must be specific. As a rule, good results follow appropriate antisyphilitic treatment. In each case this treatment should be individual, but the combination of mercury and salvarsan seems, as a rule, to give the best results. Sometimes one, and sometimes the other alone appears to give better results. Whatever treatment is adopted it should be continued till a permanent negative Wassermann reaction is obtained. Subsequent to this the management of the case should be along circulatory and not luetic lines. K.

Salvarsan in Syphilis.—Pusey (*Amer. Journ. of the Med. Sciences*, October, 1913), from an examination of our present knowledge in regard to syphilis and its treatment, comes to the conclusion that the real danger in the use of salvarsan is remote, though when it occurs it is serious. He believes that we have no good reason for believing that the use of this drug will lessen the occurrence of parasyphilitic nervous lesions, and thinks that there is some ground for the fear that it may predispose to them, except in those cases in which it cures the disease. There is no doubt that it is a powerful symptomatic remedy, and there is much evidence for thinking that where vigorous treatment is begun before the disease has generalised, the syphilis may be aborted. When the drug is used in the secondary stage, and in its result falls short of absolute cure, it is probable that its use may do positive harm to the patient. Owing to the destruction of the spirochætes, except those walled off in inaccessible parts, the body is not stimulated by the general infection to the formation of those antisubstances which are its natural defence, and so builds up little or no resistance to the subsequent invasion when the shut-off organisms again are set free. K.

Induction and Augmentation of Labour Pains.—Welz (*Amer. Jl. Obs.*, lxviii., 1) studies the experiments reported by others, and reports six cases of pregnant women whom he injected with fœtal serum in quantities varying from 18 cc. to 28 c.c. Four of the cases responded to the injection, and the birth of the child followed. Three of these cases were well developed, and one was overdue. The fourth case was in the thirty-fourth week of pregnancy, and had pre-eclamptic toxæmia. He says that the uterine fibres exhibit a definite rise of tone in response to extreme dilutions of antigen. The *ante partum* contractions of the uterus are probably due to a minor anaphylactic shock of lesser degree than that present in true labour, and also in false labour the process has not been severe enough to cause labour to proceed to its termination. Missed labour and overtime pregnancy are possibly due to an insufficient flow of birth substances into the maternal organism. In syphilis the inflammatory disturbances in the placenta allow increased amounts of birth substances to enter the maternal circulation, thus causing early birth, miscarriage and abortion. Thirty cases are reported in which pituitrin was injected to hasten the termination of labour. The average time from the injection to the end of the second stage was 4.3 hours. The average time of labour was 15.2 hours. Most of these cases responded well to i.c.c. Except in three cases the response was very evident in the longer duration of contractions, shorter intervals, and greater strength. In a few there seemed to be a tonic contraction with severer clonic contractions at regular intervals. The writer believes that parturition is caused by an anaphylactic action of proteid from the fœtus to the mother. The danger of anaphylactic shock must be kept in mind. F.

Pituitary Extract in Uterine Inertia.—Edgar (*Amer. Jnl. Obs.*, lxviii., 1) records seventy cases, 39 in the first and second stages, 19 immediately after the third stage, 6 in Cæsarean section, and 6 for induction of abortion. Vaporoles or ampoules of the drug should be used to obtain trustworthy results. For decided action 0.4 gram is required as an initial dose; repetition may be called for, as the action of the drug disappeared in about 25 minutes. If no response is secured after a second dose, the drug may be abandoned. When full or repeated doses have been given and too great resistance to delivery exists, the contractions approach to the continuous in character. In the first stage before the cervix is shortened, full doses are equivalent to ergot, and should not be used, as they may produce premature separation of the placenta, fatal compression of the fœtus, and even uterine rupture. Uterine inertia at this stage should not be treated by pituitary extract. In cases with a dilated or readily dilated cervix with inertia and not too much resistance to be overcome, the extract renders valuable aid. The observations show that the drug acts best at full term in the second stage, and if administered shortly after spontaneous or artificial rupture of the membranes. Its action was least marked when used for excessive bleeding following the third stage, and in 19 cases was disappointing. In Cæsarean section the extract appears to act quicker than ergot, but the action does not last so long. Labour has failed to be induced by the action of the drug alone. In abortions the action was disappointing. The action of the drug is uncertain and cannot be predicted from the amount of dose, the character of the inertia, or the resistance to be overcome. The drug should never be employed for inertia in any stage of labour, unless anæsthesia is at hand, and preparations complete for immediate operative delivery, to avoid uterine rupture. F.

The Operative Treatment of Inoperable Cancer. Rowntree (*Brit. Med. Journ.*, Sept. 27, 1913) pleads for the operative treatment by removal of a cancer even when there is no hope of eradicating the disease by this procedure. He points out that, for instance, the life history of a case of cancer in the tongue resolves itself into the history of the tongue itself—a history of ever-increasing pain and discomfort, and the offensive ulcer which it is impossible to keep clean. The patient, worn out by pain, loss of sleep and septic poisoning, falls an easy victim to broncho-pneumonia, gangrene of the lung, or some similar affection. In cancers of the tongue, breast, and uterus, the patient does not die from cancer, but from sepsis and its concomitants. The writer considers that few patients should be allowed to die of the primary growth alone; the number of secondary deposits ought to be in direct proportion to the excellence of our treatment, as they certainly are to the duration of the disease. In this connection the writer collects some figures. The average length of course of cancer of the tongue, untreated by operation, is fourteen months. The number of these cases in which metastases are found in internal organs is 6 per cent. Similarly the average duration of cancer of the cervix uteri is twenty-one months, and dissemination 15 to 20 per cent. Of the lip, twenty-four months and distant secondary deposits 25 per cent., while in cancer of the breast, with a total average life of three and a half years, the number of deposits is no less than 50 to 60 per cent. From these figures and facts the writer deduces that a patient suffering from incurable cancer dies too soon by several months, and that life can and should be prolonged by palliative operations on the primary growth. Prolongation of life, which in breast cancer averages two and a half years, is not the only advantage gained, but increased comfort, or rather some diminution of the dreadful misery of inoperable cancer, should be aimed at. In connection with the question of technique, that which is adapted for the radical operation is unsuitable for a palliative one. It suffices to remove the breast with all obvious growth. The wound is then covered with thick healthy flaps, which will not be penetrated easily by any growth that may have been left behind in the chest wall. In amputating a leg for inoperable sarcoma, the line of section should be just about the growth, not necessarily at the hip joint. In the tongue a simple Whitehead operation, with its low mortality, is all that is indicated when radical measures are not possible. One's aim is to remove the maximum of disease with the minimum disturbance of healthy tissue. Two dangers to guard against are sepsis and infection of the wound with cancer cells, both of which may occur in so-called operable cases. S.

Three Successful Operations for Perforated Typhoid Ulcer.—Mitchell (*Brit. Med. Journ.*, September 20th, 1913), operated on the cases 5, 4½ and 14 hours after perforation respectively, the patients being in the 43rd, 21st and 29th day of the disease. They all recovered. The operations were performed as quickly as possible, through a median incision below the umbilicus. The writer concludes that the quickest way to find the perforation is to go straight for the ileo-cæcal valve and trace the ileum upwards. It will rarely be necessary to handle more than two or three feet of bowel. All sutures should be of catgut, as silk or linen is sure to become infected and give rise to troublesome sinuses. The catgut the writer uses is prepared by boiling in absolute alcohol for thirty minutes, and stored in tincture of iodine one part, proof spirit ten parts. These patients bear the Fowler position and continuous rectal saline well. Coliuria being a very likely complication, it appears wise to put these patients at once on alkaline treatment. The writer uses 10 to 20 grains of sodium citrate every four hours. S.

Hæmic Infections of the Urinary Tract.—Kidd (*Practitioner*, November, 1913) states that pyuria, if accompanied by fever, means that pus is coming from either the deep urethra or the kidney. In males the two-glass test is necessary to distinguish between these two origins, but in females febrile pyuria means affection of one or both kidneys. Spontaneous natural cure is the rule rather than the exception in hæmic infections of the urinary tract. The kidneys may recover long before the bladder. This the writer has proved in six of the cases (18 per cent.). For instance, in one woman pus and streptococci were found in the urine drawn off from both kidneys. A week later, the fever having subsided, the bladder urine still contained blood and streptococci, but urine drawn from each kidney was clear and sterile. During the ensuing fortnight, two bladder instillations of silver nitrate (5 gr. to the ounce of water) sufficed to bring about a complete cure. Lavage of the renal pelvis cures most, if not all, of the very chronic cases. To illustrate how simple this treatment is, the writer states that he has washed out the kidneys of five different women in the course of half an hour in his cystoscopic room in the London Hospital. The author cites cases to show that pyogenic bacteria may enter the urinary tract through the blood stream, by way of the prostate, and not by the kidney. Acute hæmic urinary infections are very seldom fatal, and it is extraordinary how ill a patient may be, and yet how quickly he can recover. Nephrectomy is only necessary for a few hyper-acute cases and a few unilateral chronic cases, which resist all the treatment for eighteen months or more. In the writer's experience, the results of vaccine treatment are not satisfactory. A patient suddenly seized with pyuria and fever should be put to bed, and kept there for at least a week or ten days after the fever has disappeared. Over-exertion is the great predisposing cause of infection and re-infection. Diuresis and diaphoresis are promoted in the usual way. Potassium citrate is exhibited in large doses for two or three days till the fever shows signs of abating, when a change is made to urotropin, 5 to 10 grain doses four times a day. A catheter specimen is obtained for bacteriological investigation. Skiagrams should be taken to exclude stone, and collargograms if necessary. At the end of another week the ureters should again be catheterised, and if the kidneys have recovered, a few instillations of silver nitrate into the bladder will cure the case. If the kidney is still infected, either the catheter should be left *in situ* to drain the pelvis and enable it to be washed out twice a day for a few days, or the ureters should be catheterised every fourth or fifth day, and the pelvis washed out with 5 c.c. of 5 per cent. collargol. In chronic cases general treatment is of the utmost importance. Urotropin should be prescribed in 5-grain tabloids, one or two taken in plenty of water four times a day after meals, without intermission for at least six months. It is no use prescribing urotropin in fluid mixtures, as it decomposes almost at once. S.

Royal College of Surgeons of England.

It is announced that the Bradshaw Lecture will be delivered in the Theatre of the College by G. H. Makins, Esq., C.B., F.R.C.S., on Friday, December 5th, at 5 p.m. precisely. The subject of the lecture will be "Gunshot Wounds." Fellows and Members of the College are invited to attend. Students and others who are not Fellows or Members of the College will be admitted on presentation of their private visiting card.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial,* and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

P. R. (Suffolk).—Our correspondent will find every information respecting the climate, clothing, etc., for the district he mentions in Dr. G. Montagu Harston's book on "Care and Treatment of European Children in the Tropics." (Bailliere, Tindall and Cox.)

DR. A. M. B. (Herts).—The question of the amount of injury inflicted by an electrical current depends largely upon whether at the time of contact the patient's clothes and boots are dry or not, also whether he is standing on damp earth. The delicate or moist skin of a clerk's hand is a better conductor than the harder and drier palm of a workman.

WIRELESS.

A CORRESPONDENT (A. D.) sends us the following:—"My dear Sir," said the Doctor, "You suffer, unfortunately, from a complication of diseases, each sufficient to kill you, as very few important organs have escaped, so that it is quite impossible to say which of your complaints will be the direct cause of your death? However, if you will be kind enough to direct that I shall make your autopsy, I shall be happy to send you result by wireless should you be able to leave your future address."

M.B.EDIN. (London, S.E.).—The Milne treatment of scarlet fever consists briefly of the brushing of the throat every second hour for the first 24 or thereabouts, according to results, with 1 in 10 carbolic oil, and the inunction of the body all over, hairy parts and all, with undiluted eucalyptus oil, twice daily for the first four, and once a day for the next six days, making 14 inunctions in all. After this period it is claimed by Dr. Milne that the patient is free from infection.

Meetings of the Societies, Lectures, &c.

FRIDAY, NOVEMBER 28TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN) (1 Wimpole Street, W.).—4.30 p.m.: Dr. F. G Crookshank, Mr. Lionel E. Norbury, Mr. Philip Turner, Dr. H. Tipping, Dr. C. E. Zundel, Mr. W. J. Midelton, Dr. F. J. Poynton, Dr. Frederick Langmead, Dr. F. G., Crookshank, and other cases.

ROYAL SOCIETY OF MEDICINE (SECTION OF EPIDEMIOLOGY AND STATE MEDICINE) (1 Wimpole Street, W.).—8.30 p.m.: Dr. E. C. Snow and Dr. Hilda Clark.

MONDAY, DECEMBER 1ST.

MEDICAL SOCIETY OF LONDON.—8 p.m.: Clinical Evening.

TUESDAY, DECEMBER 2ND.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND, 11 Chandos Street, Cavendish Square, W.—1.45 p.m.: Council Meeting. 3 p.m.: General Meeting. Papers:—Dr. E. Faulks. Adjourned discussion on Dr. Getting's paper on Asylum Dysentery.

THURSDAY, NOVEMBER 27TH.

HARVEIAN SOCIETY OF LONDON.—8.30 p.m.: Discussion on the Registration of Venereal Diseases. The following have promised to take part: Dr. Stevenson, Dr. Blacker, Dr. Cautley, Dr. Maude, and Dr. Dudfield.

Appointments.

BRIDGE, J. C., F.R.C.S.Edin., D.P.H.Camb., Medical Inspector of Factories.

COOK, JOSEPH BASIL, M.D.Vict., D.P.H., Medical Superintendent of the Brentford Union Infirmary, Isleworth.

DWYER, JAMES J., L.R.C.P. and S.Irel., Clinical Assistant to the Chelsea Hospital for Women.

HARWOOD - HARDMAN, FREDERICK, M.D.Edin., Honorary Radiologist to the Princess Alice Memorial Hospital, Eastbourne.

LEY, GORDON, F.R.C.S.Eng., Pathologist to the Chelsea Hospital for Women.

LONG, D. SANDERSON, M.D.Cantab., Honorary Medical Officer to the York Dispensary.

PATRICK, JOHN, M.B., B.Ch., R.U.I., Resident Medical Superintendent of Tyrone and Fermanagh Asylum.

ROSS, WILLIAM, F.R.C.S.Edin., Examining Surgeon to the Collieries at Ebbw Vale, Monmouth

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Kirkliston (Linlithgow), Milltown (Co. Kerry).

General Infirmary, Macclesfield.—House Surgeon. Salary £125 per annum, with board and residence. Applications to the Chairman, House Committee.

Seamen's Hospital Society, Greenwich, S.E.—Medical Superintendent. Salary £150 per annum, with board, residence, and washing. Applications to P. Michelli, Secretary.

County Asylum, Chester.—Third Assistant Medical Officer. Salary £180 per annum, with board, lodging, and washing. Applications to Dr. G. Hamilton Grills, Medical Superintendent.

St. Bartholomew's Hospital, Rochester, Kent.—Resident House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to Charles Speyer, Secretary.

The Hospital for Sick Children, Great Ormond Street, London, W.C.—A Casualty Medical Officer. Salary £200 per annum, with luncheon. Applications to the Secreary at the Hospital. (See advt.)

The Hospital for Sick Children, Great Ormond Street, London, W.C.—A House Surgeon. Salary £30, washing allowance £2 10s., and board and residence in the Hospital. Applications to the Secretary. (See advt.)

Births.

KAY.—On November 20th, at 3 Pembroke Gardens, Kensington, the wife of Dr. Charles Wallace Kay, of Lymington, Hants, of a daughter.

LEGGE.—On November 22nd, at 5 Cannon Place, Hampstead, the wife of Thomas M. Legge, M.D., of a son.

THOMPSON.—On November 21st, at 2 Greencroft Gardens, N.W., the wife of Ralph Thompson, Ch.M., F.R.C.S., of a son.

UNITT.—On November 21st, at Quorn, Leicestershire, the wife of James Arthur Unitt, L.R.C.P., M.R.C.S., of a son.

Marriages.

ENGLISH—SAMPSON.—On November 20th, at Lenton Parish Church, Howard English, M.D., F.R.C.S., of Crewe, eldest son of James English, of Lurgan, to Flora, daughter of Walter Sampson, The Park, Nottingham.

MACKIE—BALL.—On November 22nd, at St. Paul's Cathedral, Calcutta, Captain F. Percival Mackie, I.M.S. (formerly K.G.O. Central India Horse), son of the late Rev. John Mackie, Rector of Filton, Glos., and of Mrs. Mackie, Compton Greenfields, to Gladys May, younger daughter of W. J. Ball, Upper Belgrave Road, Clifton, Bristol.

THOMSON—LEISHMAN.—On November 19th, at the Anglo-American Church, Beyrout, Syria, Eric A. Thomson, M.B., Ch.B., to Rose, youngest daughter of the late Henry Alexander Leishman, of Lorne, Queensland.

Deaths.

HUGHES.—On November 19th, at Marine Terrace, Aberystwyth, Dr. Richard Hughes, formerly of Llanilar

McKELLAR.—On November 17th, at "Woodleigh," Preston Park, Brighton, Eliza Mary, beloved wife of Surg.-General McKellar.

OWEN.—On November 17th, at Middlesbrough, from pneumonia, Cyril Hayward Owen, eldest son of the late Francis Owen, M.R.C.S., L.R.C.P., of Sunnyside, Leatherhead, Surrey, in his 51st year.

WELLS.—On November 14th, at Eldon Terrace, Woodhouse Lane, Leeds, George Lee Wells, M.B., B.S.Lond., M.B., Ch.B.Leeds, F.R.C.S.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, DECEMBER 3, 1913. No. 23.

NOTES AND COMMENTS.

The National Medical Union. AT a conference of delegates held at the Waldorf Hotel, Aldwych, on Saturday last, under the presidency of Mr. William Coates, C.B., of Manchester, it was unanimously resolved upon the motion of Mr. G. A. Wright, F.R.C.S. (Manchester), seconded by Dr. H. B. Greene (Wandsworth), to form a federation, with a central organisation in London, to be called the National Medical Union, the principal condition of membership to be that applicants for membership shall not be on the panel, directly or indirectly. All the federated local associations will have local autonomy. It was agreed that the subscription to the central organisation shall be one guinea for each member. Mr. Wright and Professor Russell (Edinburgh University) were elected presidents, and Dr. John Playfair (Edinburgh Medical Guild), Mr. W. Coates (the chairman of the conference), Dr. Bernard O'Connor (member of the London Medical Committee), and Dr. Greenyer (Brighton), vice-presidents of the union. Dr. Brassey Brierley (Manchester) and Dr. H. Oppenheimer (Hampstead) were elected treasurers, and Dr. R. Carswell (Wandsworth) and Mr. E. Arthur Dorrell (secretary of the London Medical Committee) were appointed secretaries. A provisional committee, representing the non-panel associations which sent delegates to the conference, was chosen, and it was arranged to establish central London offices for the union temporarily at the Waldorf Hotel. The chairman of the conference declared that the Insurance Act was a menace to the national health; and Sir Henry Burdett, who was present, said the occasion was a momentous one in the history of the medical profession. It was resolved to send messages of sympathy to the medical profession in Germany in its struggle against its position under the German Insurance system, and to the non-panel doctors in Wisbech who were the victims of the hostile demonstration recently.

The Government of the R.C.S. of England. THE recent annual meeting of Members and Fellows of the English Royal College of Surgeons has not materially weakened the hands of the present autocratic government by Council and Fellows. The attacking party have most of the argument on their side, but for all that it seems there is some truth in the assertion that there is much less unanimity and ardour in their ranks than was formerly the case. Let us see what two friends of the cause of the Members have to say about the matter. The *Lancet*, in its issue of the 29th November, professes the same friendliness to the reformers that it has always proclaimed. At the same time it laments for the space of a column the falling-off in the "vitality and conviction" of Members as to the necessity for change. Further, with regard to the arguments advanced by the college authorities, it remarks: "It is probable that these reasons are shared to-day by many more Fellows and Members than was the case twenty years ago, and this is the point which those working in the cause of reform appear to miss, despite the evidence." The time-serving policy implied in those words would have made the elder Wakley pale with anger. The *Lancet* of his days was not wont to mince matters when dealing with the party of privilege that held —and still holds—the reins of power in the English College.

Another Warning. IN the same issue of the *Lancet* appears a letter from Mr. Willmott Evans which deserves notice, as it comes from a Fellow who has always been a consistent upholder of the College. He bewails the tone of the Members and the way in which their case has been presented. The criticism of the finances of the College, he says, was "unintelligent." This warning may be of value in the future tactics of Members, who will be gratified to learn that Mr. Evans still supports the principles of the right of Members to vote for members of the Council and to sit on the Council. Why should not a great chartered corporation be compelled to present a detailed account of its stewardship at stated times? Can any supporter of the present privileged system of College government deny that there have been passages in the past history of the College which suggested most strongly the crying need of some such check on the expenditure of that body. If such occasions have once arisen, why should they not arise again? The funds of the College are mainly derived from Members, and it would seem only a fair and proper thing that they should have some sort of voice in the spending of it.

A Cause for Revolt. THE Royal College of Surgeons of England is one of the main props of the many-portal system of medical qualification. Under the present absurd system it is absolutely essential for any surgeon to take its Fellowship should he aspire to a post in any one of the important English hospitals. Some day it is to be hoped that Licentiates and Members will secure a proper representation not only in the English, but in all other Royal Colleges. Then, and only then, is there any likelihood that these Council-ridden bodies will take any interest in the protection of their constituent Members and Licentiates. Then, too, will be elected on the General Medical Council representatives of the main body of diplomates, and not, as hitherto, of the small knot of privileged persons who are the irresponsible rulers of the College, with all the associated advantages of place, emolument, title, fame, honour and glory. The whole of this mediæval survival is grotesquely out of touch with modern views and tendencies. The interests of the many must no longer be sacrificed to the personal aggrandisement of the few. Meanwhile, it is to be hoped that the faithful among the Members will not cease from bringing along their annual resolution. Some day, perchance, a new Wakley and a new journal will come to their aid. As to the falling-off in the ardour and the number of the reformers, we know of no means whereby any such changes could be definitely ascertained. On this occasion we beg leave to doubt the usual accuracy of our contemporary the *Lancet*. Even were such a diminution established, the cause survives—an abuse of corporate government privileged and unjustifiable as any that ever yet inspired revolt.

The Will to Live. Every medical man has come across cases of injury or illness in which the patient has succumbed apparently from no other reason than mental inertia. There has been no strong desire to get well, and in the absence of that powerful motive force the sick person has quietly gone under without seeming to offer the least resistance. It is in some acute disease, especially in which a crisis occurs in its course, that the influence of the mind over the body is well seen. How many times have the words of the medical attendant, "You are going to get perfectly well," spoken in a hopeful and impressive manner, acted as a magic stimulus to flagging vitality, and from that moment the downward progress has been arrested. In the case of an airman, who was seriously injured at Hendon a few weeks ago, it is reported in the daily press that he "willed himself hard to live" as soon as he partially recovered consciousness after the smash. He had sustained a bad compound fracture of the leg and was suffering severely from shock, but, to his joy, "the blackness began to lift." The occurrence of minor degrees of faintness or palpitation can sometimes be prevented or postponed by a determined effort of the will, and there is no reason to suppose that more serious derangements of bodily function may not be similarly influenced. At any rate, the power of resistance to death inherent in all men should be assiduously stimulated and encouraged in moments of physical weakness by every possible means, psycho-therapeutic included.

LEADING ARTICLES.

LONDON HOSPITAL APPOINTMENTS.

Now that the National Insurance Act has thrown the affairs of the medical profession more or less into the melting pot, it is of interest to speculate upon the future of hospital staff appointments. Under present conditions the system of appointment and tenure of these posts throws the door open to many abuses of a nature that deserves the attention not only of the medical profession, but also of the outside public. First of all comes the question of limiting the honorary staff appointments to the holders of particular degrees. The merits and demerits of this particular point have been worn threadbare, but the practice is too firmly rooted to be readily abolished. In England, needless to say, almost all the important hospital medical staff appointments are restricted to holders of the higher qualifications of the Royal College of Surgeons of England and the Royal College of Physicians of London. How is the cause of medical relief to be advanced by this careful protection of the financial interests of two colleges? How is science benefited by the exclusion from such honourable and educational positions of the members and licentiates of those corporations, as well as of the graduates of all British universities and the members of Scotch and Irish colleges? The fact of the ineligibility of, say, some three-fourths of the medical profession for the chief English hospital appointments is in itself an insult to the policy of the State which has sanctioned the establishment of more than a score of qualifying corporations. Should a State medical service become an established fact it may be anticipated that its hospitals will be manned by medical men irrespective of the source of origin of degree or diploma. On the whole it seems fairly obvious that the much-abused many-portal system of medical qualification owes its survival mainly to the vast collegiate interests that are vested in its survival. Another defect in the hospital world is the fact of non-payment for medical services. As things go, the young man having attained a high-standard qualification with a great expenditure of time, labour and money, and having gained a coveted post on a hospital staff, is obliged to give years of arduous and self-sacrificing work without remuneration. It is unfair that any man should be subjected to an imposition which is unparalleled in any other walk of life. It may be said generally of hospitals that everyone is paid directly or indirectly for services rendered, except the members of the honorary staff upon whom falls the heat and burden of the day. The philanthropists who administer the affairs of the charity are rewarded by social prominence and in some instances by titular distinction. Large fortunes are made out of the voluntary medical charities of the United Kingdom, with their vast consumption of drugs, medical appliances and the vast array of articles needed in the medical and the domestic equipment of such institutions. The administrative staff are, as a rule, fairly paid. It is only when we come to the very men without whose aid the charities could not exist that the purse strings are drawn tight, and essential services are acknowledged by vague references to the "humanity of the profession" and the like. Happily, in the case of school medical and of tuberculosis officers, medical referees and other recently created appointments a more or less adequate salary has been fixed. It is a curious fact that in London the tacit injustice of the unsalaried hospital post has been condoned by a small annual allowance. That plan is adopted in a few of the large hospitals, and we have no hesitation in saying that it would be of the greatest possible ultimate value to the public, as well as to the cause of medical science and to the patients, were an adequate salary to be attached to all hospital posts. The question of the proper administration of medical charities, according to their own rules and regulations or those of their charters, is another matter that demands attention. All who are familiar with the inner life of London hospitals, to take that part of the kingdom as an example, know that from time to time gross instances of injustice are perpetrated by these governing boards. Now and then a protest is made in the law courts, but for the most part the aggrieved persons find themselves compelled to suffer in silence. It is curious that the King Edward and the other metropolitan distributing agencies have not constituted some sort of court of informal appeal, before which complaints could be brought of official breaches of hospital rules and regulations. Years ago a fight was made by one or two persons against great odds to prevent the sale of a special hospital that stood in Hanover Square. The selling price was sent up by several thousands of pounds. The support of the great funds was not denied those who sold the enormously valuable freehold site of the hospital. Will the King Edward Fund venture to institute an inquiry now into the present value of the ground site concerned, and compare that lost birthright with the terms and stability of the substituted leasehold premises at a distance? The sale was implicitly sanctioned by the large grants made by the King Edward and the Hospital Sunday Fund. Are they satisfied with the result? It is significant that the hospital surgeon who resisted the sale was compelled to resign his post, the duties of which he had ably and faithfully discharged for many years. There is little doubt that large profits are now derived from the developed site, but it is difficult to see why the hospital should not have let the land on lease instead of parting with its freehold. The Charity Commissioners, it is only fair to add, sanctioned the sale. In a later article it is proposed to deal with the abuses that sometimes attend the filling of vacancies to honorary hospital appointments.

CURRENT TOPICS.

The Health of the Navy.

It is gratifying to note that the improvement in the health of the Navy is increasing, as compared with the preceding five years. According to the statistical report for 1912, recently issued as a Blue Book, there has been a substantial decrease in the cases of venereal disease, to which only four deaths and 141 final invalidings are attributed. The increased use of salvarsan is responsible for the improvement in this direction. The case ratio for the year under review is again lower than the average ratio for the last five years, and the average loss of service for each person compares very favourably with the five years' ratio and also with that of 1911. The final invaliding ratio and the death ratio, however, are slightly increased in comparison with the averages for the last five years, but the increases in each instance are only fractional. The total force, corrected for time, in the year 1912, was 119,540, and the total number of cases of disease and injury entered on the sick list was 76,815, which gives a ratio of 642.58 per 1,000, a decrease of 24.1 as compared with the average ratio for the preceding five years. The average number of men sick daily was 3,008.23, giving a ratio of 25.16 per 1,000, a decrease of 2.51 in comparison with the previous five years. The total number of days' sickness on board and in hospital was 1,101,013, which represents an average loss of service for each person of 9.21 days, a decrease of .88 as compared with the average for the last five years. The total number finally invalided was 2,023, of whom 98 were invalided after refusing operative treatment. The ratio per 1,000 of final invalidings was 16.92, an increase of .48 as compared with the average for the previous five years. No fresh cases are recorded under the heading "Wounds in Action," but two men are shown as invalided, one of whom sustained a bullet wound of the head in the Solomon Islands during 1911, and was invalided for facial paralysis and deafness following upon his injury, while the other was invalided for bullet wound of the thigh with fracture of the femur received in the Persian Gulf during 1910. It would be a good thing if the ventilation of seamen's quarters were to receive greater attention from the authorities than at present appears to be the case.

"Doctoring."

A correspondent in the *Westminster Gazette* has recently taken exception to the expression "unscrupulously doctored," as applied to photographs. He states very rightly that, as a medical man, he objects to the use of the word "doctored" employed in this sense, for "the implied wilful falseness and cheating for gain . . . are not the special accomplishments of doctors." This is perfectly true, but so is the fact that the popular use of the term "to doctor," or "to doctor up," as applied to things rather than human beings, carries with it a certain stigma of falsity. A person or an animal may be doctored or dosed with physic, in the sense of being patched up or healed; whereas a photograph or a painting may be doctored or faked—that is, deliberately altered or "toned down" to convey some totally different impression of the object or scene to that really existing. Similarly, pepper may be doctored or adulterated with ground datestones, and butter with animal fats. The word, therefore, is capable of many interpretations. In its degraded significance it would certainly be better if a synonym were employed, so as to avoid the suggestion of connection with medicine. Here is a matter for etymologists to consider.

The Treatment of Incipient Insanity.

The management of the so-called border-land case, in which it is almost impossible to determine the precise point at which sanity ends and insanity begins, demands considerable tact and wisdom on the part of the medical practitioner. In private practice it is easier to ensure that a discreet supervision will be exercised over the patient than in the case of a pauper who is gradually developing symptoms of insanity, but who has not yet reached the point where certification is imperative. At both ends of the social scale the same difficulties of diagnosis constantly present themselves. The subject was dealt with by Dr. Robert Armstrong-Jones, in a lecture delivered before the Medico-Legal

Society last week, on "The Rational Treatment of Incipient Insanity and the Urgent Need for Legislation." It is comparatively easy to prevent the small aberrations of conduct from becoming fixed habits, and to check the growing want of control exhibited by many patients in the earliest stages of mental disorder. Time is needed, however, for favourable influences to work, and it would be far better if the period of detention without certification authorised in England under the Lunacy Act could be extended from the present one of twenty-eight or thirty-one days to one not over six weeks, as is permitted by the authorities in Glasgow, for the special treatment of incipient insanity. In the Poor-Law Infirmary of Glasgow early mental cases are treated in separate wards, with such gratifying results that it is shortly proposed to erect a special building for such patients that will be more suitable for their needs. Dr. Armstrong-Jones pleaded for fresh legislation in the matter whereby it would be possible to place persons whose insanity is doubtful in specified homes or hospitals, suitably registered, so far as London is concerned, by the London County Council, and recognised for the purpose by the Lunacy Commissioners. Were such a scheme adopted, there can be little doubt that the public would be greatly benefited thereby.

The Diagnosis of Fractured Skull.

THE difficulty of distinguishing between concussion of the brain and a fractured skull in cases of severe head injury is known to every medical man. The occurrence of bleeding from the nose or ear—especially the latter—is often regarded as being strongly suggestive of fracture in the absence of more definite signs. In doubtful cases, where it is impossible to decide at the time of admission to hospital the real nature of the injury, the patient is rightly given the benefit of the doubt—that is, he is treated as though he were suffering from the graver condition. It is very seldom that any objection is ever taken by the patient's friends to extra care and caution being bestowed upon him, or even to being informed that he is suffering from some grave injury or disease when the subsequent course of events shows that the diagnosis was wrong. At an inquest held at Southwark the other day upon a man who died in the street after having been treated in Guy's Hospital for three weeks for supposed fractured base, the son of the deceased expressed surprise and dissatisfaction when he learned that his father had only concussion of the brain, and not a fracture, as was originally diagnosed. This ingrate was rightly taken to task by the Coroner, who pointed out that it was fortunate that the man had not a fractured skull, which was proved at the *post mortem*, and that medical men, like anybody else, were liable to make mistakes. Here was a mistake, however, on the right side, for the cause of death was found to be heart failure and to be unconnected with any cerebral lesion. There is no satisfying some people.

The Causes of Fatigue.

THE mechanism of the production of "that tired feeling" has long interested physiologists. In these days of rush and tear there is probably a good deal more over-fatigue, which is perilously akin to strain, and considerably less of the old-fashioned dog-tiredness, such as results from indulgence in a day's sport, experienced by our forefathers. And yet the development of sarcolactic acid goes on in the muscular system of the body no matter how this is exercised. In the case of other organs and tissues, there are probably toxins at work, also of a chemical nature, which impair the delicately-adjusted vital mechanisms. These were hinted at in the Lady Priestley Memorial lecture delivered last week before the National Health Society in London, by Professor W. Stirling, of Manchester. The fatigue problem is one of great interest to teachers and to the child at school. Thus it has been found that mathematics are the most, and drawing and religion are the least, fatiguing of the various school subjects, history and geography occupying an intermediate position. The time of day has an important influence upon mental work. In the case of school children the hours between ten and twelve are usually the most favourable for the tackling of a difficult subject. Older people vary considerably in their power to concentrate upon a mental problem, some preferring to work before breakfast, while others find they can achieve better success late at night. The lack of oxygen has been shown by Professor Leonard Hill to be a potent cause of fatigue, as well as of somnolence. If the reserve power of an individual be rapidly drawn upon, without allowing sufficient time for recuperation, he will soon suffer from fatigue. An important practical outcome of our knowledge of the condition predisposing to fatigue is that, if employees are made to work in good hygienic surroundings, both they and their employers will be the gainers. The most economical production of labour is to be obtained by employing men only so long as they are at their best. When this stage is passed, and fatigue has manifested itself, true economy in work ceases to exist.

The Newcastle (Ireland) Hospital Again.

IT is with regret that we find it necessary again to refer to the affairs of the Royal National Hospital for Consumption at Newcastle, Co. Wicklow. Our readers will remember that last spring, under circumstances which were fully reported at the time, the consulting and visiting medical staff found it necessary to sever their connection with the hospital. This step was forced on them by the active interference by the managing committee in questions of medical treatment. The action of the medical staff received the formal approval of the Fellows of the two Royal Colleges of Ireland. At the same time certain members of the managing committee—including its medical members—who differed from the action of the majority of the committee, resigned their seats as a protest. Since that time the managing committee has taken no step to set itself right with the profession, or to withdraw from the position it had taken up of having the right to dictate to the staff as to the treatment to be adopted in the hospital. It is with regret, therefore, that we observe from a newspaper report that certain medical men have now been induced to accept seats on the managing committee. By this step they condone the previous actions of the committee—actions which one of them, at least, joined in condemning last spring.

The Craving for Tea.

IT is said that every person craves for something —whether it be wealth, love, or drugs. Of the latter, alcohol must still hold the first place, though we are told that in certain quarters the craving for tea is threatening to oust that for the stronger stimulant. According to the final report of the Irish Milk Commission, recently issued, it is stated that "the common use of tea and bread in place of milk and oatmeal tends to degeneracy, and it is for the welfare of the community that there should be a reversion to the older articles of food. To the difficulty of obtaining milk or buttermilk has been attributed the disuse of oatmeal, the neglect to make home-made bread, and the habit of tea-drinking." A craving for tea, it is stated, creates a repugnance to milk, and the tea-drinking habit is severely condemned. "In dealing with the tea-drinking habit, we travel in a vicious circle," state the Commission. "Speaking generally, tea is in the first place drunk where milk is difficult to obtain; then, because tea is preferred to milk, no serious effort is made to procure the latter. Most parents are aware that milk is a necessary food for infants, yet we found not infrequently that tea without milk is given to babies and young children because milk is not forthcoming. Children of three months old have been brought up on tea; they get accustomed to the taste of it, as a man gets accustomed to the taste of alcohol, and the habit becomes inveterate." Most out-patient medical officers of hospitals in London are familiar with the abuse of tea by the poor, especially in relation to the feeding of young children. It is a little stretch of language, perhaps, to speak of a "craving" in regard to what may be described as a harmless national beverage, for the desire for tea cannot be compared, for instance, with that for such a stimulant as morphia, either in its intensity or in its effects.

The Family Doctor.

THE family doctor is not passing away, for, although we are constantly hearing that this is the age of specialism, it is perfectly true that every day the specialist's dependence on the general practitioner becomes more complete. The *corpus vile* has been divided into as many water-tight compartments as an ocean liner, and the family physician is the only man able to play the iceberg and to sweep away the obtruded obstacles that ordinarily interpose between, say, the bacteriologist and the eye-man. There is, no doubt, a tendency towards the department store idea of treatment. Several men representing different specialties work together. We see this practised every day to some extent, and the Mayo clinic employs no less than ten varieties of specialists in diagnosis who are available for every case that needs them. It must be soul-destroying work for a man to do nothing but administer and examine test meals all his life, but such a man probably knows all there is to know about test meals after a few years. This group diagnosis is surely feasible, but it does not do away with the family doctor. He is as necessary as ever and must be competent. He must realise, for instance, that it is important to send for a surgeon in the first twenty-four hours of appendicitis, and that 80 per cent. of growths in the mammary glands of women are, or ultimately become, malignant. The specialist may say "you press the button, we do the rest." The family doctor will always be depended on to know which button to press and when to press it.

PERSONAL.

H.M. THE KING has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of Dr. Norman Purvis Walker, M.D., treasurer of the Royal College of Physicians of Edinburgh, to be an additional member of the Highlands and Islands (Medical Service) Board constituted under the Highlands and Islands (Medical Service) Grant Act, 1913.

DR. WALTER PETTER, M.B., has been appointed Assistant Physician to the Darlington Hospital.

MR. GORDON LEY, F.R.C.S., has been appointed Pathologist to the Chelsea Hospital for Women.

PROFESSOR SIR J. HALLIDAY CROOM has been elected President of the Edinburgh Obstetrical Society for the ensuing year.

DR. ARTHUR GEOFFREY BATE, of Hove, has been appointed Consulting and Operating Surgeon to the Brighton Workhouse.

DR. CUTHBERT GERALD WELCH, M.D.Lond., D.P.H., has been appointed Chief Tuberculosis Officer to the Bedfordshire County Council.

MR. J. ST. J. STEADMAN, D.P.H., M.R.C.S., L.R.C.P., L.D.S., has been appointed Assistant Dental Surgeon to the West London Hospital.

MR. H. MORRISTON DAVIES, F.R.C.S., has been appointed Honorary Surgeon to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

THE Manchester Corporation Sanitary Committee have appointed Dr. S. Rupert Briercliffe and Dr. S. A. B. Porteous to be Tuberculosis Officers for the city.

DR. RACHEL HIRSCH, of Berlin, who is Chief Assistant at the University Clinic of Professor Strauss, is the first German lady physician to acquire the title and rank of Professor.

THE Home Secretary has appointed Mr. W. P. G. Graham, M.B., M.R.C.S., and Dr. G. F. Rogers, M.A., M.D., to be Inspectors of Vivisection under the Cruelty to Animals Act, 1876.

DR. T. F. TODD, of Sunderland, was the recipient of a handsome presentation the other day at a complimentary banquet held at the County Hotel, Newcastle, by the North of England Branch of the British Medical Association, in appreciation of his valuable services rendered to the profession.

SIR THOMAS R. FRASER has retired from his position as Chief Medical Officer of the Standard Life Assurance Company, and the directors have appointed him Consulting Physician. Dr. Francis Darby Boyd, C.M.G., has been appointed Chief Medical Officer, with Dr. David Halliday Croom as assistant.

THE State Medicine Syndicate of the University of Cambridge have appointed Dr. Anderson, Master of Gonville and Caius College, Professor Sir Clifford Allbutt, M.D., and A. D. Thompson, M.D. (Edinburgh), to be members of the managing committee for the diploma in Psychological Medicine for the three years ending December 31st, 1916.

MR. EDWARD NETTLESHIP, F.R.C.S., of Longdown Hollow, Hindhead, Surrey, who died on October 30th, left estate sworn at £26,768 gross and £23,22 net. He left the following charitable legacies payable after the death of his wife:—£3,000 to St. Thomas's Hospital for the creation or augmentation of a fund for the endowment of lectureships in the medical school, and £1,000 to the Royal London Ophthalmic Hospital.

CLINICAL LECTURE

ON

EXTRA-UTERINE PREGNANCY. (*a*)

By J. M. MUNRO-KERR, M.D., F.F.P.S.Clasg.,

Muirhead Professor of Obstetrics and Gynæcology, Glasgow University; Gynæcological Surgeon, Royal Infirmary, Glasgow; Obstetric Physician, Glasgow Maternity and Women's Hospital; Hon. Fellow American Gynæcological Society.

THE case which I bring under your notice to-day is a typical example of extra-uterine pregnancy. The clinical history, which I shall read, and the physical signs, which those of you who examine will feel on making a bimanual examination, are absolutely characteristic of this condition.

Were all the cases as typical, the diagnosis of extra-uterine pregnancy would seldom present any difficulties, but unfortunately an atypical case is not infrequently encountered, and mistakes are readily made both in overlooking the condition and in diagnosing it when it does not exist.

The following is the summary of the clinical history of the case. Mrs. R., 37 years of age, was admitted to my wards in the Royal Infirmary on December 12th, 1912, complaining of a hæmorrhagic vaginal discharge which had been present less or more for the past six weeks. She was married twenty years ago; she has had nine children and three miscarriages; her youngest child is ten months old; her last "period" occurred eight weeks ago. Patient had amenorrhœa for some five weeks; then she began to bleed. Some three weeks after the uterine hæmorrhage commenced she began to have right-sided abdominal pain. She had two or three severe spasms of pain, but in the intervals a dull, aching feeling. She was sick, and vomited at each attack of pain. She occasionally complains of slight dysuria. Her general health is good, and her pulse and temperature are normal.

Now the striking feature in this case is the fact that the patient does not look ill, her pulse and temperature are normal, and she is of good colour and consequently does not appear to have had any severe internal hæmorrhage. The explanation of this state of matters is that the patient has come under our care before rupture or tubal abortion has taken place. I should be very much surprised to find much blood in the pelvic cavity in this particular case. Now it is of the greatest importance that you should appreciate this stage of the disease. Most practitioners whom I meet, and nearly all students whom I question, have the idea that the symptoms of extra-uterine pregnancy come on suddenly, and that the woman is immediately prostrated by collapse from the sudden giving away of the gravid sac. Undoubtedly such a type, which many of us refer to as the "fulminating type," is occasionally encountered—the woman is suddenly seized with acute pain and collapses, but it is very rare indeed, and becomes increasingly rare the more one sees of extra-uterine pregnancy and the more carefully one goes into the histories of the cases. Almost invariably before tubal abortion or rupture occurs, there are more or less distinct symptoms of pelvic and abdominal disturbance, which if carefully considered, should lead one to suspect extra-uterine pregnancy.

As a rule the mistakes made result from the physician in attendance failing to appreciate the symptoms prior to the occurrence of rupture or abortion. Sometimes, of course, the medical attendant is absolutely free of blame, because the patient herself, owing to the fact that the symptoms have been so slight, has not summoned him until the graver symptoms of collapse and internal bleeding have occurred. Now let us examine the symptoms complained of by this typical case before us, and first of all let us consider the pain which she has complained of. You see this patient has been complaining of abdominal pain for a matter of fourteen days, that the pain has been paroxysmal in character, and whilst situated in the lower part of the abdomen has been specially pronounced on the right side. Sometimes she has been almost free of pain, but at intervals the pain has returned. The paroxysmal pain is caused by spasmodic contractions in the uterus and right Fallopian tube, and the dull, aching pain which she has sometimes experienced is due to hæmorrhages into the wall of the tube. In tubal pregnancy, owing to the destructive effect of the trophoblast, numerous hæmorrhages occur into the wall of the distended tube, and this gives the feeling of constant aching. In addition to the pain referred to, the patient has had slight dysuria; this, too, is very frequent in cases of extra-uterine pregnancy. Before the tube ruptures it is generally slight, but after rupture, and where there is a large collection of blood in the pouch of Douglas, there may be retention.

Another pain not present in this case, but specially marked where there is much blood in the pouch of Douglas, is rectal tenesmus. I have only observed this in a marked degree where there was a considerable amount of blood in the pouch of Douglas pressing on the rectum.

As regards pain, then you always have a dull, aching pain, with generally periods of exacerbation; you frequently have dysuria, and you occasionally have rectal tenesmus.

The second symptom present in this case is hæmorrhagic vaginal discharge. Here it came on before the pain started, but in most of my cases it has commenced after the attacks of colicky pain. The blood for the most part comes from the uterine decidua, which becomes partially separated. It may, of course, occasionally come from the tube. It is very apt to be confused by the patient and by the doctor in attendance with an irregular or excessive menstrual period. Now, here in this particular case the patient has missed one period, but a week after an expected period uterine bleeding occurred.

Generally speaking, there is a period missed, but sometimes the uterine bleeding comes on a day or two before the period, and so naturally the period is considered to be a little premature. In such cases this symptom is rather disturbing and is liable to throw the physician in attendance off his guard. But in the cases commonly encountered where one period is missed and hæmorrhage comes on at an unexpected time, the condition should arouse suspicion and should be fully investigated. When a woman, otherwise healthy, misses a period, pregnancy should always be suspected; and if she has pain and vaginal hæmorrhage, extra-uterine preg-

---

(*a*) Delivered in the University Gynæcological Department of the Royal Infirmary.

nancy should be thought of. I need not remind you, of course, that uterine abortion will present similar symptoms, so similar that only by careful bimanual examination is it possible to determine which of these conditions exists. Many mistakes are made in this connection; as a matter of fact, in most of the cases of extra-uterine pregnancy to which I have been called in consultation the attendant at one period of the case has looked upon the condition as an abortion. Again let me repeat that it is necessary to make a careful bimanual examination, if need be under an anæsthetic, before one can be certain whether the pregnancy is uterine or extra-uterine.

The third symptom complained of by our patient is a feeling of sickness and faintness, especially when she had the attacks of abdominal pain. These sensations are really due to the distension and painful contractions of the tube. As you know, nothing depresses an individual so much as abdominal pain and uneasiness.

Another symptom sometimes present, but absent in this case, is the expulsion of a decidual cast from the uterus. As you are aware, the mucous membrane of the uterus in extra-uterine pregnancy undergoes a marked hypertrophy—a decidua forms. Now it is not uncommon to get this decidua expelled during the painful contractions in the tube, but so uncertain is this symptom (personally, I have only encountered it in 16 per cent. of my cases) that it is of very uncertain value. In this particular case there is no history of its having been expelled, and as a matter of fact in actual practice it either escapes notice, coming away piece-meal in the blood clot, or is expelled some days after operation.

I have said that the physical conditions in this case are also characteristic. Let us examine her. On bimanual examination you can readily define the fundus and the uterus displaced somewhat forward. The uterus you will feel enlarged and moderately movable. Behind it and to the right side you will, I think, be able to define a swelling about the size of a Tangerine orange. This swelling is rather soft, and yet it can hardly be described as elastic; it is not freely movable, and yet cannot be said to be absolutely fixed. It is quite distinct from the uterus. As the patient is under an anæsthetic, you cannot determine whether it is painful or not; but as a mater of fact, when I examined her yesterday, it was distinctly painful. That is an important feature in most ectopic sacs.

You observe that the tumour, whilst situated at the right side, is also lying behind the uterus. This is the general rule. You also observe that the appendages on the left side are readily palpable and feel normal. Now the only conditions other than extra-uterine pregnancy that could be present here is an intra-uterine pregnancy with a co-existing ovarian cyst—pyo-salpinx—appendical abscess.

An appendical abscess can be excluded because of the history of the case and because the rigidity of the abdomen is not extreme; besides, the swelling is well defined, and its upper limit can be well defined; in other words, there is no diffuse inflammation of the surrounding parts. Pyo-salpinx can also be excluded because there is no history of old standing pelvic inflammation, and because the appendages on the other side are, as I have stated, normal—unilateral pyo-salpinx is comparatively rarely encountered.

A small ovarian cyst with an intra-uterine pregnancy cannot be absolutely excluded. But the whole history of the case so clearly points to extra-uterine pregnancy that I am disposed to make an absolute statement that extra-uterine pregnancy is the condition we have to deal with here, and that the tube has probably not ruptured.

We shall now operate on the case, and you will see for yourselves the condition of matters in the pelvis. My assistant and myself will now change into fresh rubber gloves and put on fresh sterilised gowns, caps, and masks. The skin of the abdomen we sterilise by means of a 5 per cent. iodine solution, and the patient is placed in the Trendelenborg position.

Now you see the abdomen opened by a median longitudinal incision; here are loops of bowel connected with the right appendages, but very easily separated. The sac, as it is exposed, is obviously connected with the tube, and is adherent to the ovary. On looking at the tube you see the fimbriated end, and projecting from that end a red mass. We have a perfect example here, therefore, of tubal pregnancy in process of aborting. There is no rupture of the tube; the tube wall is dark red in colour owing to the numerous hæmorrhages into its substance, but so far no actual rupture has taken place. There is, as you will see, only a small quantity of free blood in the pouch of Douglas; she has therefore lost very little blood.

Now I think in this case I shall be able to save the right ovary and remove only the gravid tube. You might very naturally say: Why not shell out the ovum from the tube as you would in a uterine abortion, and leave the tube intact? Well, I have tried that method of treatment once or twice, but have always found that a considerable oozing continued from the tube so emptied. This may be negligible, but so far I have never closed up the abdomen and left the tube behind, although this has been done on several occasions by different operators.

Now you observe I examine the left adnexa and appendix. They are obviously quite normal. I now, you see, swab out the pouch of Douglas and pour in a little saline solution. The abdomen I close in layers. I apply three through-and-through silkworm sutures as splint stitches. I close the peritoneum with continuous catgut and sheath, and the rectus muscle with interrupted sutures. The edges of the skin you see I coapt with Michelle's clips. I dab spirit over the surface of the wound and place a strip of gauze over it, and then tie the splint silkworm sutures over the gauze; lastly, a light gauze dressing is applied over the wound, and the patient is put back into bed.

But before we separate, just look at this specimen. You will see for yourselves it is a very beautiful example of a tubal abortion. The implantation of the ovum must have been in the ampulla of the tube; now, when such an implantation takes place, the ovum buries itself in the tube wall by means of the trophoblast. Numerous small hæmorrhages occur into the wall at the implantation site just as they do in the wall of the uterus when the ovum implants itself there. But while the uterus is properly constructed for the implantation of an ovum, and the destructive effect of the trophoblast is inhibited by the decidua which forms there, it is quite otherwise where the ovum is implanted in the tube. In the tube the trophoblast has free play for its destructive influence.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Professor Hutinel, M.D., Physician to the Hôpital des Enfants Maladies, Paris. Subject: "Meningeal Hæmorrhage in Childhood."*

ORIGINAL PAPERS.

A PLEA FOR A COMBINED SURGICAL AND MEDICAL TREATMENT OF PULMONARY TUBERCULOSIS.

By W. C. MINCHIN, M.D., B.Ch.

The attention which has been recently directed toward the mechanical treatment of pulmonary tuberculosis in The Medical Press and Circular cannot fail to be of much interest to the profession. Dr. Tucker Wise writes to encourage those who have become tired of using tuberculin to adopt the excellent postural method of treatment which he has recommended. The gratifying results which are often obtained are no doubt due to its getting rid of fluid of the nature of "shut-away fluid." If it does not actually get rid of it, it prevents stagnation by producing some movement of the fluid. I think it is necessary, for the perfect development of the *Bacillus tuberculosis*, to have a stagnant medium in which to grow luxuriantly. Any disturbance, then, of their formed colonies, is likely to weaken or destroy them. A striking example of this has been presented to most practitioners from time to time when, on finding a tuberculous mass in the abdomen, a surgical operation was deemed necessary, but on opening the abdomen it was found advisable not to proceed further, owing to the extent of the disease. The result has often been a cure, merely from the mechanical disturbance, washing or drainage, which left the bacilli at the fountain-head no longer in a stagnant condition. By the adoption of a postural method of treatment we can only hope, however, to get rid of accumulations of fluid from the bronchial tubes and their dilatations, and an occasional cavity in the pulmonary tissues which has an opening so situated that by gravitation it can be emptied. It may be by tilting, in a manner similar to the emptying of a bottle from the top, or of a hot-water bed jar from an opening in the middle, or of a tea-pot from one at the bottom, or combinations of these. When cavities can be so emptied, the great difficulty with which we are met is that we do not know where the openings, when they exist, are situated, nor how best to pose our patient.

In those cases where the openings are not so situated as to be readily emptied, or when a cavity containing pus exists in the lungs without any opening, or when such cavities are multiple, I think it is clear that no postural method can be entirely satisfactory, even though it cures some patients, and relieves symptoms in others by clearing away some fluid of the nature of shut-away fluid. It is then as an adjunct, rather than as a substitute, that this treatment will show its best results, and I believe it to be a valuable adjunct to any treatment. What we want is a rational procedure which will show a reasonable chance of cure in every case. In all the varied remedies brought forward there is no treatment amongst them which will do this, although every one of them has its merits and its cures to claim. The question we ask ourselves is: Why will any given treatment cure one case and be powerless even to relieve symptoms in another? Our powers of observation, so far as cause and effect are concerned, are more upset in pulmonary tuberculosis than in any other disease. In my opinion the curtain is raised and the view is clear when we come to consider the part played by "shut-away fluid." I have described "shut-away fluid" as a stagnant fluid having no exit and infected with the *Bacillus tuberculosis*, and I have endeavoured to explain elsewhere (*a*) my reasons for suspecting its presence. I think it is unreasonable to expect to sterilise the shut-away fluid contents of a pulmonary cavity by means of any serum or germicide taken internally, put into the blood-stream, or inhaled. These cannot be so applied that they can in any way affect the bacterial processes which are taking place within the fluids. To persist, then, in any of these lines of treatment in a case of shut-away fluid in the lungs is simply to look on while our gradually fading patient dies, unless nature steps in and causes a pneumothorax, or the contents of the cavity are discharged into a bronchial tube. Mechanical interference is necessary; but why should we rely on it alone? Surely if we express the shut-away fluid with an artificial pneumothorax or pleural effusion the time has come when serum or germicides can act. In these cases, as a routine, a cure can only be effected by a combined treatment. It is reasonable to expect that with a combined treatment there would be no necessity after the performance of an operation for artificial pneumothorax, when the fluid has been expressed, to keep the lung collapsed for such a length of time as is now customary. Many are of the opinion that the virtues of an artificial pneumothorax are due to the rest which the lung obtains; but from observing that often the temperature and other evidences of active disease are immediately put right after the operation, I think it fair to conclude that something has been expressed from the lung, and that the continued pressure prevents its re-formation. Instead of the continued pressure it would be reasonable to expect just at this stage that serum or many germicides would prevent the bacilli from lighting up the disease again when the pressure was relaxed and the gas drawn off. Experiments upon the dead lungs show that shut-away fluid can often be expressed without the lungs being completely collapsed. Dr. Allison and others have suggested the formation of an artificial pleural effusion which may yet be shown to be preferable to a pneumothorax, but the object of each is identical. The question before the advocates of each is: What is the proper time to operate? It is clear that the earlier it is performed the better the chance of success, but then many early cases get well under more simple treatments, and, very naturally, patients shrink from such an ordeal as having their lungs collapsed if it is avoidable. I have formed a definite opinion upon this point which I trust will be accepted as my apology for occupying so much space. I have found, as previously asserted, in The Medical Press and Circular, March 12th, 1913, that the oil of allyl is very deadly to the *Bacillus tuberculosis* in the human body. It saturates the human tissues and blood-stream in a manner which cannot be excelled by any serum. Its action is rapid, and in a case of pulmonary tuberculosis, if no shut-away fluid exists, a great improvement will be noticeable in a few weeks, and this will continue. If there be no improvement in three weeks under its influence in any given case, I have never seen either itself, any serum, germicide, or sanatorium treatment, do any good subsequently, and I believe we are dealing with a case of "shut-away fluid." This, then, would appear to be the time for mechanical interference, which, if employed thus early, would, I think, relieve us from the many disappointments met with through adhesions, and overtaxing the powers of the uncollapsed lung. I think that shut-away fluid fre-

---

(*a*) "The Treatment, Prevention and Cure of Tuberculosis and Lupus with Allyl Sulphide." By W. C. Minchin, M.D.Dub., late Medical Officer of the Kells Union Hospital and Fever Hospital. London: Ballicre, Tindall and Cox. 1912.

quently exists in very early pulmonary cases which run a rapid course, and without mechanical interference these are hopeless from the first.

THE PLACE OF THE OPEN-AIR SCHOOL IN PREVENTIVE MEDICINE. (a)

By Sir GEORGE NEWMAN, M.D., D.P.H., F.R.S.E.,
Chief Medical Officer and Principal Assistant Secretary, Board of Education.

Sir George Newman said that the ventilation of many of the ordinary elementary public schools of the country was at present open to criticism. He gave instances of various schools showing that the amount of carbonic acid gas was in some cases double the quantity which ought to have been permitted, and he said these conditions were representative of what was taking place all over the country. The effect upon the child of a close atmosphere was deleterious. What was required was more blood circulation, more oxygen taken in, the lungs better expanded, and more food eaten. Consequently what they were aiming at in the open-air process was almost the opposite to what they were getting in the ordinary schools of the country.

In an open-air school a child would get cheap and nourishing food given to it at regular intervals and under suitable conditions. Scarcely enough importance has been attached to the value of proper rest in cases of surgical tuberculosis, and he showed pictures on a screen of patients at the Lord Mayor Treloar Cripples' Home and College, Alton, where the children got the full benefits of the best methods of rest and sunshine. This school was probably the best of its kind in the world. There children were kept in a position of rest from eighteen months to two and a half years, and the results obtained were far in advance of what had been hitherto obtainable by surgical interference.

Again, the hygienic way of life was a most important factor in the open-air school. Rest, work, and nutrition conduced to a healthy life. The exercise should be organised; the child should be trained to personal cleanliness, and it should be suitably occupied. In an open-air school a child got more individual attention than in an ordinary school, and the same applied to medical attention. Special educational methods were also required, because it was estimated that not less than 10 per cent. of all the children in the United Kingdom did not or could not respond to the ordinary methods of education. This special education required to be more objective—more manual—the child taught to do things instead of repeat them; and an endeavour should be made to get the child to express himself, and then to train him and educate him along that line. The open-air school was therefore for the dull and backward and retarded child, though not for the feeble-minded child.

Ferryboats had been used for open-air schools in New York, and it had been suggested that they should be used in London. But the same reason for utilising them in New York did not apply to London, and there were probably other reasons why ferryboats on the Thames would not be as satisfactory as open-air schools.

It was idle to think that open-air schools offered a panacea for all children. There was the difficulty of classification to begin with, and he thought the classification should be based on physical and medical grounds. There were difficulties as to the home influences, where a child slept at home in a bad atmosphere for eight or nine hours at night. A great deal of the malnutrition in children was no doubt due to the food, but not sufficient importance was given to the fact that a great deal of it was also due to their not giving the children in the great cities sufficient rest. One solution was residential schools, but of course they had the disadvantage of taking the child away from its home and its mother. The conditions of success in the open-air school were that there should be adequate organisation and suitable and proper equipment, proper medical supervision, co-operation on the part of the parents with the teacher in the open-air school, the admission of suitable cases.

Sir George Newman specified the diseases which ought to be dealt with in open-air schools, and showed a number of pictures of the little cripples at Alton, who are under the supervision of Dr. Gauvain, the chief feature of which was the remarkable application of splints of various types, and which were shown being applied in the "rest and sunshine treatment," which is the leading feature of this home. Dealing with the diseases which ought to be treated in open-air schools, Sir George Newman said that more than half a million debilitated and badly-nourished children were really in need of treatment in these schools. It was also estimated that there were 15,000 children in this country suffering from some condition of tubercle who needed special treatment. Then there was the question of nervous diseases, which included chorea, or what was known as St. Vitus's dance, and mental dulness and retardation. Children with adenoids and bronchial catarrh also required special treatment, and thus it might be said that there were nearly half a million children in our schools who required the open-air process; other diseases which ought to be specially treated in these schools were rickets, various forms of heart disease, both functional and organic, in children. Further, there was a group of miscellaneous diseases, including oral sepsis, where the teeth were so bad as to set up a septic condition of the mouth, which led to a whole group of diseased conditions, and which might produce a lasting injury to the child. Lastly, spinal curvature ought to be a subject of special treatment in the open-air school.

At Alton, in Hampshire, Sir William Treloar and his friends had secured a building and turned it into a hospital, and had not only adopted the process which had been applied at Berck, in France, but had greatly improved upon it, so that the Alton school was now probably superior to anything that could be done at the school in France, which treated upwards of 1,000 children. Much of the good result at Alton was undoubtedly due to the excellence of the nursing.

In conclusion, Sir George Newman spoke in high terms of the work being carried on by Dr. Gauvain at the Alton school, and as before mentioned, showed some pictures giving practical illustrations of the splints and the "rest and sunshine treatment."

PYELITIS. (a)

By CLAUDE FRANKAU, B.S.Lond., F.R.C.S.Eng.

I am endeavouring to-night to give you some account of a condition which has only been really studied fully during the last few years, and which from the obscurity and difficulty presented by many of the cases possesses considerable interest. By pyelitis is meant an inflammation of the pelvis of the kidney. Such inflammations are naturally rarely if ever confined to the pelvis alone, and a condition of inflammation of the pelvis and kidney substance or pyelonephritis is usually present.

(a) Second Chadwick Lecture delivered at the University of London, November 11th, 1913.

(a) Paper read before the Chelsea Clinical Society, November 18th, 1913.

ÆTIOLOGY.

Excluding tuberculous infection, which is a separate matter, and would open up an enormous field, and which I do not propose to touch upon to-night, from the point of view of ætiology, the cases may be divided into two classes :—

(1) Those due to a hæmatogenous infection;
(2) Those due to an ascending infection.

The hæmatogenous type of infection is the commonest —the organism most frequently found is the B. coli communis in 75 per cent. of the cases; staphylococci and streptococci are occasionally found, and such organisms as B. typhosus, B. pyocyaneus in rare cases. The condition is most usually unilateral, and although there may have been no apparent abnormality of the kidney prior to the attack it is not uncommon for some predisposing cause to have been present.

The more frequent of such predisposing causes are :—

(1) Congestion due to exposure with a resulting impairment of resistance;
(2) Unnatural mobility also causing congestion;
(3) Local trauma;
(4) The presence of foreign body—*i.e.*, a calculus;
(5) The irritative effects of drugs, poisons, or the toxins of disease.

That such predisposing causes are almost essential is affirmed by the well-known clinical fact that a healthy kidney can excrete organisms in large numbers without itself being affected, and from numerous experiments on animals in which it has been found that uninjured kidneys are not affected by the injection of organisms into the renal artery, whereas if the kidney is locally injured or is congested by producing venous obstruction, pyelitis and pyelonephritis supervene.

The focus of origin of the organisms may be apparent in the form of a boil, an ischiorectal abscess, or pyorrhœa; more often the origin is obscure; in such the focus is presumably intestinal, and the result of intestinal stasis.

Ascending infections per se with no obstruction to the outflow of urine are extremely rare—if they do occur at all they are the result of an extremely virulent organism; even in these cases proof positive of an ascent is wanting and the pyelitis may be hæmatogenous in origin.

The two great safeguards against an ascending infection are (1) the constant downward flow of urine in the ureters; (2) the valvular arrangement of the ureteric openings into the bladder which prevents regurgitation. It has been experimentally proved that the bladder on artificial distension will actually burst before any back leakage occurs through the ureters. Constant back-pressure from stricture or enlarged prostate or from pressure on the ureters from a pelvic growth or pregnant uterus destroys eventually one or both of these safeguards. Thus in enlarged prostate or stricture the constant over-distension of the bladder which may never be fully emptied destroys the valvular nature of the ureteric openings and allows of dilatation of the ureters, which in their turn are distended by stagnant urine.

An ascending infection either directly *viá* the urine or up the ropy mucus lining the ureters is easy to understand and there is no need to invoke the aid of the peri-ureteral lymphatics as is done by some writers. As will be shown later, constant back pressure also produces certain changes in the kidneys which makes them peculiarly liable to infection.

PATHOLOGY.

In the early stages of an acute hæmatogenous infection the whole kidney is enlarged and congested—the pelvis is hyperæmic and may show a purulent exudate. If the condition progresses miliary cortical abscesses or linear streaks of pus appear in the cortex—this may go on to gross abscess formation with complete destruction of the kidney. In hyperacute cases infective gangrene of the entire organ may occur.

If an acute attack subsides and a chronic condition supervenes the body of the kidney shows no evidence of active inflammation but fibrosis as a result of former infection is present. The pelvis shows thickening of its lining epithelium, which is reddened in irregular patches and may present the appearance of red velvet. In an ascending infection similar changes occur, but commence in the pelvis itself whence, owing to the antecendent back pressure effects, the inflammation rapidly spreads over the entire kidney substance.

SYMPTOMS, SIGNS AND DIAGNOSIS.

The two types described above—*i.e.*, the hæmatogenous and the ascending, differ to a considerable extent, and are best described separately.

The hæmatogenous type.—Here the onset is sudden and acute and is commonly ushered in by rigors which are repeated during the attack. Pain often of a severe character is complained of in one or both loins and the back; the pain may be referred down the course of the ureters. Headache, malaise and at times extreme drowsiness from toxæmia are noteworthy symptoms. The urine is voided with extreme frequency in small quantities; in severe cases pain on micturition is present and may be acute; this is due to a secondary infection of the base of the bladder. In several hyperacute cases I have seen severe and profuse hæmaturia.

On physical examination the face is flushed; the tongue is furred and signs of profound toxæmia may be present. The temperature is raised with intermittent pyrexia reaching as high as 105°, or even higher. The pulse is full and bounding, and of increased rate. Sweating occurs during the rigors. In the loin or loins there is extreme tenderness with muscular rigidity on palpation—this usually prevents any estimation of renal enlargement. Two spots of maximum tenderness can be elicited, one where the 12th rib cuts the outer border of the erector spinæ muscle; the other an inch and a half above and to the outer side of the umbilicus.

An examination of the urine is most important as a differential diagnosis often depends entirely upon this. In the early stages to casual examination there may be no abnormality apart from a trace of albumin; pus, both macroscopic and microscopic, is often absent, but a single drop of urine examined under a high power will be seen to be swarming with organisms. Pus may be absent throughout—this I have seen in one hyperacute case which happily resolved and eventually entirely recovered; a variable amount, however, is commonly present during the later stages of the acute attack. In the subacute stages microscopic amounts alone persist. The reaction of the urine depends on the organism producing the lesion. Unless suppression is commencing the amount of urine passed is normal or even increased. As mentioned above, hæmaturia is present in some cases and may be marked.

With appropriate treatment the acute symptoms subside with fair rapidity. The temperature falls, pain subsides, and the general condition improves. A complete resolution may occur in 7-10 days; it is more common, however, for a chronic condition to supervene, which is described later.

Fulminating cases with death in 48 hours are met with, but fortunately are rare; these are commonly due to the streptococcus or a strain of B. coli of exalted virulence.

A differential diagnosis has to be made from appendicitis, pyosalpinx, cholecystitis, typhoid and influenza.

A careful review of symptoms and signs with special attention to the condition of the urine obtained by the catheter should be sufficient—the most difficult cases to differentiate are appendicitis and cholecystitis from a right-sided pyelitis with acute onset. Cystoscopy—a proceeding to be avoided in acute cases, as it may cause an exacerbation of symptoms—will confirm the diagnosis where grave doubt exists. In unilateral cases intense congestion will be seen in the neighbourhood of the ureteric orifice on the affected side with swelling and œdema of the mucous membrane, and occasionally ulceration; the remainder of the bladder wall is comparatively healthy in appearance. In the latter stages and, more particularly if both sides are affected, there may be a universal cystitis—again, however, more marked around the ureteric orifices; in this condition the clue to the diagnosis is the character of the effluxes, which are cloudy from pus.

Treatment.

Complete rest in bed in a warm room is essential. A brisk mercurial purge, followed by a saline draft should be given to ensure a free action of the bowels. For the pain, relief can be obtained by the local application of antiphlogistine, spread upon lint or of thermogene wool. Morphia should be withheld if possible. Aspirin in 10 grs. doses is often efficacious. The diet should consist of fluids, preferably milk alone at first, with barley water or soda water. Large quantities of Imperial Drink are of the utmost value in flushing the urinary system. The urinary antiseptics are of little or no value in the early stages, and may indeed do harm, but large doses of the alkalies in simple or effervescing mixtures should be given for their diuretic value, and also with a view to producing alkalinity of the urine. An X-ray photograph should be taken as soon as the acute symptoms have abated to exclude the presence of a calculus as the causative factor. A culture of the causative organism should be made as early as possible in order to obtain an autogenous vaccine.

In the fulminating cases the question of a nephrectomy may arise; brilliant results have followed in apparently desperate cases. The remedy, however, is a severe one, and its necessity has been called into question since apparently hopeless cases often resolve under medical treatment. A nephrotomy with drainage of the pelvis is said to be a sounder operation, as less shock is experienced; the disadvantage of this procedure is the likelihood of a permanent lumbar fistula resulting. Operation is urgently indicated if acute symptoms persist, in spite of treatment, for more than 4 or 5 days, and the patient is becoming profoundly toxic, but it is doubtful whether nephrectomy is justifiable unless the condition of the other kidney has been ascertained by catheterisation of the ureter.

In many cases the disease is only met with or recognised when *in the chronic form*—the acute initial attack may have been neglected by the patient or a faulty diagnosis may have been made in the first instance. The characteristic symptoms of a chronic pyelitis are:—

(1) Lumbar pain—either unilateral or bilateral, and if the latter, often called by the patient "backache." This pain is intermittent with exacerbations, and varies from a "dull ache" to "sharp stabbing" pains;

(2) Increased frequency of micturition, both by day and night—this may be very marked and may suggest a cystitis;

(3) Associated with these symptoms there is often malaise, headache, and loss of appetite with associated loss of weight.

Relapsing acute attacks often occur.

On examination it is common to find a sallow, unhealthy complexion and a furred tongue, often abnormally dry in old-standing cases. Palpation may reveal tender enlarged kidneys, but this is not the rule. Tenderness at the "pelvic points," both behind and in front, is frequent. General lumbar tenderness is almost constant. The urine obtained by the catheter contains pus in microscopic or macroscopic quantities and is often turbid from bacteria. The reaction depends upon the causative organism. A differential diagnosis has to be made from chronic pelvic inflammations in the female, stone in the kidney and cystitis. The former two conditions may be excluded by careful pelvic and X-ray examinations; the latter can only be differentiated by cystoscopy. Cystoscopy in these cases is of the utmost importance, and, in my opinion, should be practised in every case in order to confirm the diagnosis.

The appearances are characteristic; the main portion of the bladder wall is normal. About the trigone, and more particularly in the neighbourhood of the ureteric orifices, there is injection; in the latter situation this may be intense and presents the appearance of flame-shaped patches just below and internal to the openings. The effluxes, if much pus is present in the urine, are cloudy; the frequency is often increased—this is the more noticeable if the condition is unilateral.

In all cases a careful bacteriological examination of the urine should be made with the view of preparing an autogenous vaccine. If the patient is unable to lie up exposure to cold and wet are to be carefully avoided. The diet should be full, but light; excess of meat, rich foods and strong tea are to be avoided, as also is alcohol, unless in small quantities well diluted. Large amounts of bland fluid must be taken by the mouth either in the form of barley water, Imperial Drink, or Contrexéville water; it is an admirable plan to take a pint of the latter water before breakfast on an empty stomach. The bowels should be carefully regulated by suitable aperients.

As to drugs the two most important are urotropine and the alkalies. If, as is usually the case, the urine is acid, large doses of potassium citrate—up to six drachms a day—should be given with a view to securing alkalinity of the urine. As soon as this is achieved, and it may take eight or ten days, the alkali is stopped and a mixture containing 5 grs. of urotropine with 30 grs. of acid sodium phosphate is prescribed. This method appears to give the best results as urotropine is most effective in an acid mixture.

The results of vaccine therapy are extremely variable, and I must say that, on the whole, I am disappointed by them. Yet at times brilliant successes follow this method—so much so that there is no doubt that full and adequate trial should be given over a prolonged period. Autogenous vaccines are essential, and the initial dosage must be small; reaction, if the dose is too large, may be severe. I have seen complete, but fortunately temporary, suppression follow an initial dose of 10 million B. coli vaccine. The usual initial dose of autogenous coli vaccine that I give is one million, the dose being gradually increased up to 80 or 100 million.

Two other methods are also available, and may be briefly referred to; in the first place, good results are claimed from irrigating the renal pelvis through a ureteric catheter. No particular difficulty presents itself in this method, but the results are, in my experience, not striking. The organisms are deeply embedded in the substance of the pelvis and kidney, and the comparatively weak solutions used (*i.e.*, Argyrol, ½ p.c., etc.), are not likely to be able to reach them.

Finally, as a last resource, operative measures may have to be undertaken. Two lines of treatment are possible:—

(*a*) Pyelotomy through a lumbar incision.

(*b*) Nephrectomy.

The former is applicable to very resistant bilateral cases with recurring and severe symptoms. A tube is sewn into the pelvis of the kidney, and the cavity is washed daily with antiseptic solutions. Good results are claimed, but I have no personal experience of the method, which is liable to be followed by a persistent sinus.

Nephrectomy is, of course, only possible in a unilateral case, and then only after making quite certain of the healthy condition of the opposite organ by catheterisation of the ureters. The method is drastic, but at times is justifiable. I have now in hospital a patient who suffered from a left-sided pyelitis for three years, which resisted all methods of treatment. She was in a miserable condition, and had become extremely emaciated and was worn out with pain. I ascertained that her right kidney was normal, and then removed the left kidney. The result is a striking success, and the patient in the two months following operation put on over two stone in weight.

Prognosis.

The immediate prognosis as regards life in acute cases may be regarded as good; the vast majority of cases tend to resolve more or less completely with appropriate treatment. The fulminating cases are, fortunately, rare, and the outlook is grave, especially if the infection is bilateral. Chronic pyelitis must necessarily be regarded as a condition which shortens life; the fibrosis which results from the inflammation in itself tends to impair the renal function, and any subsequent acute attack may be followed by the most serious results. Phosphatic concretions are also frequently deposited in kidneys the subject of chronic suppuration. The constant pain and toxæmia also act severely on the patient, who may actually die of exhaustion. Cases, therefore, which are resistant to treatment should be carefully examined, with a view to extirpation of the affected kidney, provided that its fellow is proved to be sound by catheterisation of the ureter.

The Ascending Type.—Where chronic back-pressure from some obstruction to the urinary passages has been present for a considerable period definite changes occur in the kidney: the pelvis and tubules show a variable degree of dilatation, and there is a marked increase of interstitial fibrous tissue. More or less marked signs of renal insufficiency are also present. The tongue is dry, the breath slightly offensive, thirst is complained of, and there is often a dull frontal headache. Large amounts of urine of low specific gravity with a trace of albumin are passed. If such a condition be present the advent of sepsis is fraught with the gravest consequences to the patient, and it follows that no case of chronic urinary obstruction should be neglected, and also that in the instrumental treatment of such cases the greatest possible precautions should be taken to secure asepsis.

The usual history of the disease in this type of case is that the patient who is known to have some urinary obstruction, either as the result of the use of a septic instrument or spontaneously following a neglected cystitis is suddenly seized with pains in the back with rigors. The temperature is raised in the early stages. The pulse is rapid and full. The tongue becomes rapidly furred and foul; vomiting may be marked and persistent: diarrhœa is often present. The urine becomes diminished in amount and is loaded with pus and albumin. If the infection is severe and anuria results, the temperature drops below normal. Headache and great thirst are complained of, and finally the patient dies in a state of uræmic coma. In less severe cases, with adequate treatment, the infection subsides, with, however, considerable further destruction of kidneys, which are already crippled and with a great tendency to relapse at a subsequent date.

Treatment.—In all classes of case it is of the utmost importance to relieve the obstruction to the outflow of urine. The safest and most satisfactory method of doing this is by suprapubic cystotomy. The operation is simple and can be performed in a few minutes under gas or gas and oxygen; very little shock results. In a few selected cases it may be possible to treat a stricture by internal urethrotomy, but it must be remembered that any interference with the urethra in such conditions is in itself likely to be followed by anuria, owing to the pronounced reflex mechanism which is involved. The obstruction having been relieved, the general condition of the patient must be treated. In mild cases hot fomentations to the loins, together with large amounts of fluid by the mouth and purgation are often sufficient. In severe cases more drastic measures may be necessary. If anuria and uræmia are threatening, hot-air baths should be given. Saline intravenous infusion is also of great value. If anuria has commenced, and the re-establishment of the urinary flow by the above means cannot be obtained, as a last resource a unilateral or bilateral nephrotomy with drainage may be attempted. The operation is a severe one and involves a general anæsthetic, but occasionally success follows. If the patient recovers from the attack, a course of urinary antiseptics and vaccine therapy should be instituted and continued for some weeks, after which time, if the general condition is good, the causative lesion may be dealt with by appropriate measures.

It will be seen from these remarks that the prognosis in these cases is grave; in fact, it has often been said that the onset of rigors in a case of urinary obstruction is the death sentence. Without perhaps going as far as this, it may at least be said that life is gravely endangered and the importance of early and adequate treatment of all cases or urinary obstruction may well be emphasised.

OPERATING THEATRES.

MIDDLESEX HOSPITAL.

Appendicitis.—Mr. Sampson Handley said that these cases illustrate both aspects of the practice of administering a purgative in the early stage of appendicitis.

Case 1.—A young man was seen by Dr. McDowell, of Wandsworth, for acute pain in the right iliac fossa of twelve hours' duration. His temperature was 102°, his pulse full and quick, and there was right iliac rigidity and marked tenderness. An ounce and a half of castor oil was administered and produced three good actions of the bowels. Simultaneously the pain disappeared, and the following morning the temperature was normal and the patient practically convalescent.

Dr. McDowell is a practitioner of great experience, for whose opinion Mr. Handley had a high respect. He is a convinced advocate of the value of an initial purge in appendicitis. Nevertheless, in Mr. Handley's opinion, nine successful cases of the type of Case 1 cannot outweigh the lesson of the case he was about to relate.

Case 2.—A little girl, æt. 10, was seized one evening with abdominal pain which persisted through the night. At 8 a.m. next morning her mother administered a purge which acted in a few hours. Simultaneously pain ceased and the patient said that she felt better. On the same evening, however, vomiting and pain returned. Mr. Handley saw her with Dr. W. P. Ker, of Clapham—whom, rather late, her parents had called in—on the next day but one. She had a temperature of 102°, and a pulse of 120, with marked rigidity and tenderness of the lower abdomen. Operation the same evening at the hospital disclosed a large pelvic abscess and an acutely inflamed appendix with a round perforation situated ¾ inch from its tip. It appeared from the history that appendical peristalsis produced by the purgative had precipitated the rupture, with temporary relief and subsequent aggravation of the symptoms.

Doubtless the commonest cause of acute appendicitis is the presence of some obstruction to the lumen which prevents the emptying of the appendix. If the obstruction is only a partial one, or one which can be overcome by the application of an extra push, a purgative will do what is necessary. But if the obstruction is one which cannot be overcome, rupture of the softened and inflamed appendix is the result. Until we are able to distinguish occlusion of the lumen from partial or removable obstruction, the use of purgatives was, in his opinion, indefensible.

A Note on Fluctuation in connection with an Operation on an Abscess.—Mr. Sampson Handley said that including the method it was his purpose to describe there were three ways of testing for fluctuation.

(*a*) The one-finger method. The student pokes the swelling with his right forefinger. The only advantage of this method is that the left hand need not be removed from the trouser pocket.

(*b*) The two-finger method. This is the method usually taught. The two forefingers are employed, one in an active and the other in a passive *rôle.* With one the swelling is pressed upon, whereupon if fluctuation is present the other finger is passively elevated. But across the course of a muscle, and in fat, this test gives a positive result which only the trained observer can distinguish from real fluctuation.

(*c*) The three-finger method was the one he wished to describe and to recommend. The tips of the two forefingers and of the middle finger of the left hand are firmly planted upon the swelling, marking out an equilateral triangle of an area rather smaller than the limits of the swelling. The right forefinger is next sharply pressed into the swelling at right angles to its surface. Fluctuation is present only if the two fingers of the left hand move away from each other horizontally in the plane of the skin at the moment when this is done. Any movement of the fingers in a vertical direction is to be ignored.

It would be seen that the method consists essentially in the artificial production of a true expansile impulse in an inelastic bag containing a fluid. It is evidently not infallible, for these conditions may be present to some extent in certain very soft encapsuled tumours.

This three-finger or expansile method of testing for fluctuation effectually distinguishes real fluctuation from the pseudo-fluctuation of substances such as muscle and fat. He would be interested to know if such a simple device had occurred to others than himself.

Mr. Handley said he had endeavoured to practise the virtue of brevity, which is so rare in medical oratory.

This virtue had been described as the soul of wit, a fact which may account by converse reasoning for the longitude of medical writings.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Pathology.

Meeting held Friday, November 14th, 1913.

The President, J. B. Coleman, C.M.G., M.D., F.R.C.P.I., in the Chair.

Dr. Coleman, in taking the chair for the first time, said it was his pleasing duty to thank the Fellows for the honour conferred upon him by electing him President of this Section of the Academy of Medicine.

SPONTANEOUS RUPTURE OF THE HEART.

Dr. A. R. Parsons, in showing this specimen, said that the patient first came to him complaining of flatulence and jagging pains in his right hypochondrium. In connection with the family history it was mentioned that the mother of the patient died from "burst aneurysm of the heart," and amongst the brothers and sisters of the patient there was a history of cancer of the stomach. The patient was engaged at hard manual labour. Physical examination showed nothing abnormal, nor did the urine contain any abnormal constituent. An examination after a bismuth meal discovered nothing abnormal. On examination of the contents of the stomach a positive reaction for blood was obtained, but there was no trace of free hydrochloric acid. He suffered from flatulence and food had to be taken every two hours. He was gradually increasing in weight, and would not consent to operation, as he insisted that his heart would not stand it. He became acutely ill at 2 a.m., and had to call in Dr. Winder. Dr. Winder suspected stomach trouble, possibly perforation; but physical examination showed that neither perforation nor peritonitis had occurred. The patient died shortly afterwards quite suddenly.

Dr. Parsons said that his diagnosis was some form of ulceration, although it could not be overlooked that the patient had gained in weight. The pain he regarded as most likely anginal.

A *post-mortem* examination was made, and on opening the thorax the first thing unusual that was noticed was blood in the pericardium. On opening the pericardium, fluid blood at once escaped. The stomach was found to be quite small, and there was no evidence of gastrectasis, but along the lesser curvature was found a hard mass suggestive of malignant disease, but no enlargement of the glands was discovered. The heart and lungs were removed, and given to Professor O'Sullivan for examination. It was evident that death was due to rupture of the heart, which was a very rare cause of death. It was mentioned that Quain had collected 100 cases, of which 77 were of rupture of the left ventricle, and the majority occurred in patients over sixty years of age.

Two points which impressed him were—1st. That hunger pain is not pathognomonic of duodenal ulcer, and 2nd, that steady and progressive increase in weight is not incompatible with malignant disease of the stomach.

Professor A. C. O'Sullivan said the heart showed a rupture, which apparently ran along the anterior wall of the right ventricle close to the septum, and about three-quarters of an inch long. Both ventricles appeared to be ruptured. It was suggested that blood from the left ventricle must have been pumped into the right ventricle when the septum gave way, and immediately afterwards the wall of the right ventricle ruptured. There was extreme fatty infiltration and diffuse fatty degeneration of the heart muscle. The stomach contained a raised mass running from one curvature to the other, which caused thickening of a large area of the stomach wall. Two sections of it were shown under the microscope. There was no ulceration found anywhere. The cancer was of a rather unusual type—small round-celled—and it was only after several sections were made that the cancerous nature of the growth was established. He remarked how seldom one found a state of mental excitement or agitation associated with spontaneous rupture of the heart. He had, however, met with one instance of it.

The President said the condition was a very rare one. George II. died of rupture of the heart at the age of seventy-six. The condition always appeared to be due to fatty degeneration of the heart muscles. He inquired how long the symptoms of rupture were present before the patient died, and if there were endocardial changes at the site of the rupture.

Professor White said it would be of interest to know the number of cases where the rupture was due to diffuse fatty degeneration. He referred to three specimens in the College Museum, in each of which the rupture was due to a localised degeneration of the coronary artery or a branch.

Dr. Parsons, replying, said, with reference to the duration of the symptoms, that when the patient was first seen, as far back as March last, he complained of constricting pains round his stomach, but whether this was to be attributed to the malignant disease of the stomach he was not quite certain. If due to the cardiac degeneration he would date the symptoms back about six months prior to death. With regard to the question as to whether this was to be looked upon as a case of localised degeneration or a diffuse process, he suggested that the specimen showed both.

FAVUS.

Dr. T. T. O'Farrell brought forward this specimen to draw attention to the technique of fixing and staining the hairs for spores and mycelial threads in cases of ringworm and favus.

He used a Gram-Weigert method, and placed the various solutions in successive drops on a white tile. This simplified the process, and rendered the recovery of the hairs an easy matter. The results were excellent.

GLIOMA OF THE FOURTH VENTRICLE.

Dr. T. T. O'Farrell said the specimen was taken from a patient, æt. twenty-four, who was occupied as a labourer in a malthouse. Up to five weeks previous to being seen the man was in good health. It was then noticed that when stooping he was inclined to fall forward. On examination, Romberg's sign was present. Pulse and respirations were normal; temperature sub-normal. Within a week after his first examination the patient came into hospital. When walking to hospital he got a fainting fit. His pulse was weak; he spoke clearly. About twelve hours after admission his speech thickened, and he became stupid. He complained of headache, and his face dropped on the left side. The paralysis extended, and he died about five hours afterwards. At the *post-mortem* examination the brain was examined for hæmorrhage, but none could be found in either side until what appeared to be a large clot was discovered in the fourth ventricle. The conclusion was formed that it was a hæmorrhage into a tumour. Sections showed it to be undoubtedly a glioma. The position was of interest.

The President said that it was obvious that an exact clinical diagnosis would have been extremely difficult as the patient was able to walk about up to a comparatively short time before death.

NOTE ON THREE FATAL CASES OF PHARYNGITIS (with specimen).

Dr. Boxwell read a note on three cases of fatal pharyngitis which had occurred during the scarlatina epidemic in September of this year.

The first two cases showed the intimate relation between scarlatina anginosa and diphtheria. Streptococci were at work in all three cases, but how far diphtheria was responsible for the death in the first case it was impossible to say. In Case II. the recovery of diphtheria from the blood was unusual and interesting. The third case was probably a pure streptococcal septicæmia. Unlike the other two, the temperature ran a very high course—over 105°—almost continuously throughout the illness. A vaccine was made from the pus, but the child was dead before a dose could be administered.

DILATED STOMACH.

Dr. Boxwell also showed a case of obstructive dilatation of the stomach. Owing to the absence of jaundice, the presence of free hydrochloric acid, and swarms of sarcinæ, together with the absence of lactic acid and Boas-Oppler bacilli, it was thought at first that the dilatation was merely atonic. After a few days' rest in bed, combined with lavage, strychnine, saline injections, and a selected diet, the tone of the stomach recovered, and peristalsis became visible through the abdominal wall. On gentle massage, a tumour appeared in the right hypochondrium, which subsided with a gurgle, as though discharging through a narrow opening. It was now clear that there was organic obstruction of some sort, but the patient was too weak for any attempt at operation. She gradually became comatose, and died fourteen days after admission. At the autopsy a small scirrhous cancer of the head of the pancreas was found causing partial obstruction of the duodenum.

NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, November 13th, 1913.

The President, Dr. David Walsh, in the Chair.

Mr. Dennis Vinrace showed a man, æt. 25, with large, symmetrical, pigmented patches, of some two years' duration, on the inner side of both feet. Three months ago lichen planus hypertrophicus was diagnosed, though the thickening had now disappeared.

Dr. Eddowes held the view of lichen simplex, ascribing the pigmentation very possibly to arsenic internally.

Mr. Vinrace replied that squill and digitalis had been given, but that he knew of no evidence of arsenic.

Mr. Dennis Vinrace showed a man, æt. 32, a gardener, with a dry, branny and crusted rash on both hands and forearms. The onset, three months ago, had been sudden, numerous bullæ and a raw discharging surface occurring universally from the elbows to the finger-tips. His circulation was feeble and the hands dusky. There had been progressive improvement following absence from work and mild applications of calamine and plumb. acet.

Dr. Walsh pointed out that the cardiac dulness was one inch outside the nipple line, and that there was a systolic apical murmur and thrill. He had paid a good deal of attention to plant rashes, especially those due to daffodils, or the so-called "lily" rash. In all cases which he had had an opportunity of examining within the past two years he had found some serious defect in the circulation, usually a valvular lesion of the heart. Under certain more or less obscure conditions the juices of most plants seemed able to cause a dermatitis, especially when there was any preceding damage to the skin. There was the well-known *primula obconica*, and he himself years ago had recorded a case due to contact with *angelica*, cut by a confectioner and laid across his bare arms. In Mr. Vinrace's case there was no clue to the precise plant at fault, but there was the predisposing cause in the defective circulation.

Mr. Dennis Vinrace brought forward a girl, æt. 11 (previously shown), with lupus exanthematicus on the left cheek and tip of the left elbow. Six years ago scarlatina, morbilli and varicella occurred successively and ran their course within a period of three or four months. The rash of the chicken-pox all appeared within a few days, and the sores (multiple lupus) all persisted some two years. With the exception of the two surviving lesions referred to on the cheek and elbow, all the sores healed after a further fifteen months, during which active treatment had been applied individually to the lesions. During the last five months ten applications of CO_2 snow had been made to the cheek and elbow with most beneficial results. The centre of the patch on the cheek had healed, and the circumference, which was ulcerated and discharging, was now dry and much improved under the snow.

Dr. Eddowes hoped the case would be shown again in a few months' time, when it would be very interesting to note whether the snow had destroyed the tubercular organisms.

Dr. Sequeira showed a case of cicatricial alopecia following X-ray treatment for ringworm five years ago, done at a school in the East End of London. The scalp was covered with a number of small closely-set patches of baldness, apparently permanent. The case was not seen by him till recently, and he had therefore no opportunity of verifying the original diagnosis.

Dr. Walsh pointed out that the look of the head resembled syphilitic alopecia areata, the numerous small patches giving the well-known moth-eaten appearance. The depressed bridge and general facies of the child to some extent bore out that view.

Dr. Samuel suggested that it may have been a case of favus.

Dr. Eddowes suggested the use of ointment. The nature of the scar did not, in his opinion, preclude all chance of regrowth of hair. It certainly had not the usual appearance of an X-ray scar.

Dr. Sequeira said the mother stated that the child had never been the same mentally since the X-ray treatment, but had become dull and gone down to a lower standard at school. All the hair was stated to have come out after the X-rays, but not to have grown again on the patches.

Mr. Vinrace asked if X-rays affected single areas only, as would appear.

Dr. Sequeira showed a girl, æt. 10, who had suffered since two years of age from recurrent attacks of herpes in the right cheek. These attacks were associated with nasal catarrh. The same spot on the cheek was always attacked, and the eruption lasted for a few days. There were some enlarged glands under the jaw, and the tonsils were enlarged on the same side as the eruption. Dr. Sequeira suggested following Jonathan Hutchinson's liquor arsenicalis treatment.

Dr. Walsh thought the rash probably originated as a reflex to some morbid nasal condition.

Dr. Eddowes agreed it was probably connected with some morbid condition of the left nostril.

Dr. Samuel asked how the last speaker explained the suggested association.

Mr. Vinrace quoted the case of a young man with recurrent herpes 16 years, which took several days to develop and several to clear up, but the disease disappeared eventually under arsenic.

Dr. McLatchie recalled a case of recurrent herpes on groins, treated with arsenic, in which herpes frontalis and zona developed later.

Dr. Meachen had seen a number of cases in school children. Besnier said it occurred in two places—upon the buttocks and the face. Personally, he always used arsenic. Some patients lost the herpetic tendency at puberty.

Dr. Norman Meachen showed a case of

BROMIDE ERUPTION

on the backs of both legs of a girl of 15. The lesions were symmetrical, scabbed, greenish, and infiltrated. No other parts were affected. The patient had attended the Queen's Square Hospital about ten months for epilepsy. In this case the bromide was essential to the treatment of the nerve trouble, and it became a question which one was to choose between—the epilepsy or the eruption.

Dr. Walsh remarked that there was no really satisfactory treatment of bromide rash, and apart from leaving off the drug little could be done. The condition became serious at times, and indeed might even prove fatal.

Dr. **Samuel** said it had been claimed that by increasing the dose you stimulate the kidneys and get rid of the bromism. In one interesting case a child developed a rash from suckling at the mother's breast.

Mr. T. P. **Beddoes** said sometimes the kidneys were stimulated by large quantities of fluid and by stimulating the skin by pilocarpine; and there were other recognised methods of treatment.

Dr. **Meachen** showed a child, æt. 11, with a chronic condition of the hands due to xerodermia. The mother stated that the skin became dry when the child was one year old; mother and brother have same affection. Patient has roughness of the skin over the shins, and the palms dry, hard and smooth. The hair was thin and scanty.

Dr. **Walsh** said years ago he used thyroid gland in these cases, and that was, he believed, now an established remedy.

Mr. **Vinrace** suggested the use of liquid paraffin internally and externally.

Dr. **Samuel** showed a case of lichen scrofulosorum of twelve months' duration treated with codliver oil externally and internally, as recommended by Hebra. The eruption was dense in its early stages, but has nearly cleared up under treatment. There was a family history of tuberculosis—a sister had been in a sanatorium, but patient had no other signs of the disease.

Dr. **Eddowes** said the case was undoubtedly one of lichen scrofulosorum. The little papules were situated at the sweat pores.

Dr. **Samuel** mentioned that several observers had recently found tubercle bacilli in the lesions. This eruption was sometimes a sequela of tuberculin injections. He did not agree that it was the sweat pores which were affected chiefly, but more often, though not invariably, the hair follicles, which accounted for the grouping which was so frequent a feature of the disease. The eruption was a valuable sign of existing tuberculosis in the system which might otherwise be overlooked.

Dr. **Samuel** showed (2) a case of specific disease. The patient, æt. 24, single, was under treatment for syphilis, and recently developed well-marked pityriasis rosea. It was now of three weeks' duration. The distribution was characteristic, viz., trunk, proximal part of limbs, but attacking face and distal. There was no herald patch, but the way the lesions followed the lines of cleavage was characteristic. The peripheral scale, too, differed from other skin diseases by the collarette having its free margin turned towards the centre. The itching in this disease was a variable factor, and was a sort of converse to what obtains in lichen planus—*i.e.*, in lichen planus it is exceptional not to itch, in pityriasis rosea it is exceptional to itch. The pathology was *sub judice*, but he had so often found pityriasis capitis in this disease, and very frequently it occurs in syphilis, and is not uncommonly associated with urticaria. The statement that one attack immunises from a second is not invariably true, as he had seen recently a case which has had repeated attacks of pityriasis rosea.

(3) A case of molluscum contagiosum in a girl, æt. 10. Dr. Samuel said the disease was no doubt due to an ultra-microscopic organism, just like warts, and is common in birds and domestic canaries, also in fowls. The treatment is perfectly simple and efficient.

(4) A severe case of acne vulgaris that had resisted all forms of treatment, including vaccine, but at length cleared up under X-rays. The patient is 24 years of age.

(5) A case of supposed dermatitis artefacta in a woman of about 40. A finger had been removed, and about a month later several blisters appeared on the back of the hand. The lesion improved under plaster of Paris. The finger was amputated for accident, and a compensation of £15 was paid by the employers. Another claim was to be made.

Dr. **Sequeira** had a very similar case that had gone on for three years. It improved wonderfully under plaster of Paris. Patient was supposed to cause the wounds with dry mustard.

Mr. **Vinrace** said that the other side of the case should be carefully considered. If done deliberately what was the underlying mental condition?

Dr. **Samuel** said that apart from the question of compensation and other material benefits, there always arose this question of hysteria—that is to say, the artefact is simply an external expression of a possible repressed mental complex—according to the Freud school, always of a sexual nature, although he was not of the opinion that sexual repressed complexes are always at the root of the trouble, yet often they are, and this expression is just as real as a hysterical anæsthesia or paralysis, and to his mind needs similar treatment—viz., a psycho-analysis with subsequent suggestion, either waking suggestion or hypnotic suggestion. The one thing to avoid doing in these cases is to tell the patient bluntly that you have seen through the cause of the disease, as it invariably leads to disaster and a change of physician. Cure the patient by all means, but preserve silence as to your suspicions.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held November 20th, 1913.

President Mr. **Robert Jones**, F.R.C.S., in the Chair.

Mr. F. **Jeans** read a note on the

"LANE KINK."

Mr. Jeans could not agree with the theory that this condition was due to the upright position. He had never met with it except in association with appendicitis. Where the ileum was kinked he had found that division of the band of adhesion released the ileum, and the lozenge-shaped space so formed was sutured and reformation of the band was prevented by getting the bowels moved early and keeping them released.

Mr. F. T. **Paul** agreed with Mr. Jeans' view of the causation of the kink, and considered there was no warrant for extensive operations such as had been recommended.

Mr. G. P. **Newbolt** read a note on a case of

APPENDIX ABSCESS,

in which there were continued rigors and high temperatures for some weeks after the abscess had been drained and washed out. A vaccine had been made, the discharge having been found to contain an enterococcus which could not be identified. The patient made a complete recovery, which Mr. Newbolt said no doubt was due to the vaccine.

Dr. **Macalister** read a paper on

INFLUENCES OF THE VENEREAL DISEASES.

Dr. Macalister spoke of the influence of public opinion on morality, citing the changes that have taken place as to the use of alcohol, as to the housing of the poor and the use of the individual cup by some Nonconformist bodies in their Communion service. He went on to speak of the part that Dr. W. Carter and Dr. Birkbeck Nevins both past presidents of the society, had taken in the repeal of the C.D. Acts in 1886. It was proved that these Acts did not lessen the evils they were supposed to remedy. At the same time they caused a lessened sense of responsibility from government recognition of immorality. Dr. Macalister thought that other countries would follow the lead of England in giving up such regulative systems. Army statistics showed that when these regulations were rescinded there was a progressive decrease in disease. Education was making the soldier more moral and temperate. With regard to the general population it seems evident that no substantial decrease in the disease is occurring, and a growing number of diseases which were not formerly considered to be syphilitic in origin are now definitely proved to be due to that infection. Dr. Macalister alluded to the fact that proofs are forthcoming that there are occult forms of syphilis, that the results of the infection are far more widespread than was imagined, and that a considerable number of diseases which were not previously known to be associated with syphilis are due to it, as in some cases of mental deficiency, and of epilepsy. Again, it had been shown that congenital heart disease, some gynæcological conditions, many diplegias and cases of paralysis are due to syphilis. Dr. Macalister was with Dr. F. Wilson investigating cases of fibroid bronchiectasis and finding the spirochæte. General paralysis of the insane had been proved to be syphilitic in origin. Gonorrhœa had been proved to be one of the gravest dangers to which womanhood is subjected.

Dr. Macalister appealed to the medical profession as a whole to lend all their influence to educating the public so that they could understand how these diseases not only brought trouble to individuals, but were interfering with labour, were costing money in the provision for the suffering patients rendered unfit to earn a livelihood, and causing deterioration of the race. He pointed out the difficulties of notification until the public had been sufficiently educated. When that had been effected we could go on to the effective segregation of carriers, certification as to fitness for marriage, and other measures for stamping out the plague.

In the discussion that followed, Dr. Hope said that the history of the Contagious Diseases Acts taught us what to avoid, and he thought that in order to give practical and effective assistance in curing the evil the Society should render every help to the Royal Commission. He proposed that a small committee of the Society should be formed to go into the different points and consider how best to assist the Royal Commission. It was agreed that a committee should be formed with power to add to its numbers. The names proposed were the President (Mr. Robert Jones), the Secretary (Dr. A. Stookes), Dr. Macalister, Dr. Hope, Dr. Buchanan, Dr. E. Nevins, Dr. Barendt, Dr. MacKenna, Professor Beattie and Miss Evans.

ULSTER MEDICAL SOCIETY.

Meeting held in the Medical Institute, College Square North, on Thursday, November 27th, 1913.

The President, Mr. A. B. Mitchell, in the Chair.

A POST-GRADUATE DEMONSTRATION OF DISEASES OF THE EAR, NOSE, ETC.

Mr. Craig: (1) A patient from whom a malignant growth of the larynx was removed by thyroid fissure; (2) a patient from whose ethmoid region a large exostosis was removed; (3) a rare case of anterior lenticonus; (4) a patient showing transplantation of skin for severe cicatricial ectropion; (5) peculiar exudates in the fundus following injury; (6) a case of complete loss of iris from injury.

Dr. Davidson: (1) Fœtal remains in an adult of pupillary Membrane; (2) three cases of old iritis showing (*a*) posterior synechiæ, (*b*) pupillary exudate, (*c*) complete occlusion of pupil; (3) double optic neuritis with facial paralysis of cerebral or supranuclear type; (4) retinitis pigmentosa; (5) specific retino-choroiditis; (6) phthisis bulbi—senile ectropion, and malignant disease of fauces, tonsil, and tongue; (7) coloboma of iris and choroid; (8) macula—peculiar condition resembling coloboma; (9) ecchymosis of conjunctivæ and skin of renal origin.

Dr. Killen: (1) Chronic glaucoma; (2) infantile glaucoma; (3) secondary glaucoma with cupped disc (operated); (4) optic atrophy; (5) detachment of retina with extreme myopia, cured by strong saline subconjunctival injections.

Dr. M'Cready: (1) Two cases of traumatic cataract; (2) serpent ulcer, with hypopyon; (3) chronic dacryocystitis; (4) iritis; (5) syphilitic ulceration of throat; (6) lupus of nose and palate.

Mr. Henry Hanna: (1) Phlyctenular disease of the eye; (2) episcleritis; (3) penetrating wound of eye, from which a piece of metal was removed by Haab's giant magnet; (4) carcinoma of the middle ear, under observation for over two years, with results of operations; (5) chronic interstitial keratitis (both eyes), with fundus changes and high myopia; (6) case of adherent leucoma; (7) ulceration of tonsil (malignant); (8) case of iritis; (9) case of iridocyclitis.

Mr. H. H. B. Cunningham: (1) Staphyloma of cornea; (2) keratitis; (3) kerato-irido-cyclitis (two cases); (4) phlyctenular disease; (5) choroiditis.

Dr. Hayden Mulholland: (1) A case of pterygium. (2) marginal blepharitis; (3) trichiasis (result of trachoma); (4) three cases of monocular choroiditis occurring in members of the same family; (5) a case of unusual injury to the eyelid.

SPECIAL REPORTS.

GENERAL MEDICAL COUNCIL.

NINETY-EIGHTH SESSION.

FIRST DAY, TUESDAY, NOVEMBER 25TH, 1913.

The Acting President, Mr. Tomes, in the Chair.

On the suggestion of the Chairman of the Business Committee the Registrar called the roll.

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to unanimously: "That Mr. Tomes, Senior Treasurer, be requested to take the Chair and to act as President for this day's meeting."

(Mr. Tomes in the Chair.)

The following letter was read from the President:

"University of Glasgow:
"November 17, 1913.

"My Dear Registrar,—As you are aware, I had a sudden and serious illness at the end of October. Though I am now recovering fast, I am not yet strong enough to be out of bed, and my physicians assure me that I shall be unable to go to London next week.

"In the circumstances I must very reluctantly ask the Council to excuse me from duty in the Chair. I have asked Mr. Tomes, as Senior Treasurer, to take my place at the Executive Committee and at the opening of the Session. With your ever-ready help I have endeavoured to arrange the business in a convenient form. The Council will perhaps be willing to forego the usual presidential address for this time.

"Please convey to my colleagues my deep gratitude for the kind and encouraging messages they have sent me, and say that I look forward to a speedy resumption of my active co-operation with them in the work of the Council.

"I am,
"Very truly yours,
"Donald MacAlister."

Moved by Dr. Little, seconded by Dr. Norman Moore, and agreed to with acclamation: "That this Council has received with great regret the President's letter informing them of his serious illness and of his inability to preside at the present session. The Council cannot but feel that the President's unsparing devotion to the duties of his office has contributed to break down his health. The members are rejoiced to hear that he is now making steady progress towards recovery, and they look forward with pleasure to the prospect of having their summer meeting presided over by him, to the great advantage of their proceedings and, as usual, with conspicuous credit to himself."

The following communication from the Victoria University of Manchester was read:—

"The Victoria University of Manchester,
"October 9th, 1913.

"Dear Sir,—I beg to inform you that Professor Lorrain Smith has resigned his post as representative of the University on the General Medical Council, and the University Council have appointed Professor Grafton Elliot Smith, F.R.S., as their representative for a period of two years.

"Yours faithfully,
"Edward Fiddes,
"Registrar.

"The Registrar,
"General Medical Council."

The official notification of the appointment of Grafton Elliot Smith, M.D., as representative of the Victoria University of Manchester for two years from October 8th, 1913, was then read.

Dr. Elliot Smith was introduced by Dr. Norman Moore.

The Acting President called attention to the following resolution, adopted by the Executive Committee, at its meeting on November 24th, 1913, expressing regret at the death of Sir John Tuke. "That the Executive Committee convey to Lady Tuke and the family of the late Sir John Batty Tuke an expression of sincere sympathy at the loss they have sustained by his death, and desire to place on record their high appreciation of his many services to the Council from his appointment in 1887 till his retirement in 1912, and in particular of his devoted labours as Chairman of the Education Committee."

On a motion from the Chair, seconded by Sir John Moore, the Council associated itself with the resolution of the Executive Committee.

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to: "That the Council do adjourn at 4 p.m. to day to enable certain Committees to meet for the completion of their Reports."

The Council next proceeded to the reception of portraits of

(*a*) Sir William Turner, sent by himself.

The Registrar has received the following from the late President:—

6, Eton Terrace, Edinburgh,
26th September, 1913.

Dear Mr. King,—You will receive a box containing a framed photogravure engraving of a portrait by Sir James Guthrie, P.R.S.A., recently presented to the University of Edinburgh. I ask the General Medical Council to accept it in memory of my long association with it as a member, and for six years as its President.

Believe me,
Faithfully yours,
Wm. Turner.

(*b*) Lord Ilkeston, presented through Dr. Saundby.

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to: "That a vote of thanks be accorded to Sir William Turner for the photogravure engraving of a portrait of himself by Sir James Guthrie, P.R.S.A., which he has kindly presented to the Council."

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to: "That a vote of thanks be accorded by the Council to the Dowager Lady Ilkeston and to Dr. Saundby for the portrait of their late esteemed colleague Lord Ilkeston."

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to: "That the Tables showing the results of competitions for commissions in (*a*) the Naval Medical Service, (*b*) the Royal Army Medical Corps, and (*c*) the Indian Medical Service be received and entered in the Minutes, and be referred to the Examination Committee for its consideration."

Moved by the Chairman of the Examination Committee, seconded by Mr. Hodsdon, and agreed to: "That the thanks of the Council be conveyed to the Director-General of the Medical Department of the Royal Navy, the Director-General of the Medical Department of the Army, and the Under-Secretary of State for India respectively, for the Returns which they have again furnished to the Council, with the request that such returns may in the future continue to be furnished to the General Medical Council."

On the motion of the Chairman of the Business Committee, seconded by Sir Henry Morris, strangers then withdrew, in order that the Council might consider in camera a Report by the Executive Committee in regard to applications for restoration of names after erasure under Section XXIX. of the Medical Act. 1858, and a Report by the Dental Committee in regard to applications for the restoration of names after erasure under Section XIII. of the Dentists Act, 1878.

Strangers having been re-admitted, the President announced that the names of James William Skelley and James Forrest had been restored to the *Medical Register*, and that the names of Frederick Ellis and Edward Joseph Regan had been restored to the *Dentists' Register*.

The Chairman of the Education Committee presented the following Report:—

Report.

The Education Committee reports that as a temporary list of examinations qualifying for admission to the Students' Register applicable to the year 1914 was adopted at last Session, and that as it is not yet possible to arrange this list in its final form, the Committee propose to postpone its Report upon the whole subject until next Session when it will be possible to place all the details before the Council.

John Yule Mackay,
Chairman.

November 25, 1913.

Moved by the Chairman of the Education Committee, seconded by Dr. Norman Moore and agreed to: "That the Report of the Education Committee be received and entered in the minutes."

Moved by Dr. Little, seconded by Sir Charles Ball, and agreed to: "That the following communications from the Irish Branch Council be received and entered in the minutes":—

(*a*)

"Branch Medical Council (Ireland),
"35, Dawson Street,
"Dublin, 20th June, 1913.

"Sir,—The Branch Medical Council meet here today, and, having formed into Committee in accordance with resolution No. 13 (confirmed minutes, 1913, page 36),

"Mr. Robert C. B. Maunsell, F.R.C.S.I., was nominated as Assistant Examiner for the Apothecaries' Hall;

"Dr. John Magee Finny, M.D., was nominated as an Inspector under Sect. 18 of the Medical Act, 1858.

"I have been directed to forward these names to you in accordance with the resolution of Council.

"Your obedient servant,
"James Little,
"Chairman of Committee.

"To the President,
"General Medical Council."

(*b*)

"Branch Medical Council (Ireland),
"35, Dawson Street,
"Dublin, 20th June, 1913.

"Sir,—At a meeting of the Branch Medical Council, held here to-day, Dr. Adye-Curran, on behalf of the Apothecaries' Hall, Dublin, handed me a letter of protest, copy of which I have been directed to forward to you.

"Your obedient servant,
"James Little,
"Chairman, Branch Medical Council.

"To the President,
"General Medical Council."

(*Copy*)

"Apothecaries' Hall of Ireland.
"Mary Street, Dublin, 20th June, 1913.

"Sir,—As representing the Apothecaries' Hall of Ireland I beg to protest against your proposed action of appointing either an Inspector or a Surgical Examiner to act in conjunction with the body which I represent, it being illegal for you to do so, that power alone being vested in the General Medical Council.

"I am, Sir,
"Your obedient servant,
"F. G. Adye-Curran, Lieut-Col., J.P.,
"Representative of the Apothecaries' Hall of Ireland on the General Medical Council.

"The President,
"Irish Branch,
"General Medical Council."

The President, pursuant to the resolution of the

Council of May, 30th, 1913 (Minutes, 1913, pp. 35-36), thereupon appointed Mr. Maunsell :—

"299 Oxford Street,
"London, W.,
"June 27th, 1913.

"In pursuance of a resolution of the General Council of Medical Education and Registration of the United Kingdom, acting under Section 5 of the Medical Act, 1886, Robert C. B. Maunsell (F.R.C.S. Irel.) has been appointed an Examiner in Surgery to assist at the qualifying examinations which are held by the Apothecaries' Hall of Ireland, and to perform the duties specified in the said section or otherwise prescribed under the provisions therein contained.

"The appointment continues for the four years beginning June 21st, 1913.

"Donald MacAlister,
"President."

He also appointed Dr. Finny :—

"299 Oxford Street,
"London, W.,
"June 27th, 1913.

"In pursuance of a resolution of the General Council of Medical Education and Registration of the United Kingdom, acting under Section 18 of the Medical Act, 1858, John Magee Finny, M.D., has been deputed to attend and be present at any of the examinations (other than the examinations in Surgery) required to be gone through in order to obtain the qualification of Licentiate of the Apothecaries' Hall, Dublin, during the year beginning June 21st, 1913.

"Donald MacAlister,
"President."

Dr. Adye-Curran asked a question as to the capacity in which Dr. Finny was deputed to attend the examinations of the Apothecaries' Hall.

The Chairman of the Examinations Committee answered the question by referring Dr. Adye-Curran to the terms of Dr. Finny's appointment by the President.

The Council then adjourned.

SECOND DAY, WEDNESDAY, NOVEMBER 26TH, 1913.

Mr. Tomes in the Chair.

On the suggestion of the Chairman of the Business Committee the Registrar called the roll.

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to unanimously :—"That Mr. Tomes, the Senior Treasurer, be requested to take the chair for this day's meeting."

(Mr. Tomes in the Chair.)

The minutes of the last meeting were taken as read and confirmed.

The Council proceeded to the consideration adjourned from May 28th, 1913, of the case of Alfred Benson, registered as of 79 Maida Vale, W., M.R.C.S. Eng. 1880, M.B.U.Oxfd. 1880, who had been summoned to appear before the Council on the following charge :—"That being a registered medical practitioner you were on January 8th, 1913, convicted at the Central Criminal Court on your own confession of the following misdemeanour—namely, of having unlawfully, falsely, knowingly, and deceitfully put forward and represented that certain declarations made by you upon forms of application for passports for certain persons named Louis Kiseneyder and Lucas Küschneyder respectively were true ; for which offences you were fined £50."

At the conclusion of the proceedings on May 28th, 1913, the President announced the decision of the Council as follows :—

Mr. Alfred Benson, I have to inform you that the Council has found your conviction proved ; that the Council takes a very serious view indeed of the gravity of the offence of which you have been convicted, and that it has already marked its sense of the gravity of such offences by issuing in the medical journals and elsewhere in November, 1911, a warning notice as follows :—

"Whereas registered medical practitioners are in certain cases bound by law to give, or may be from time to time called upon or requested to give certificates signed by them in their professional capacity, for subsequent use either in Courts of Justice or for administrative purposes. And whereas such certificates include, amongst others :—

"Certificates : (*a*) Under any Statute relating to births, deaths or disposal of the dead ; (*b*) under the Lunacy Acts ; (*c*) under the Vaccination Acts ; (*d*) under the Factory Acts ; (*e*) in relation to children or to excusing school attendance ; (*f*) in connection with sick benefit, insurance and friendly societies ; (*g*) in connection with workmen's compensation ; (*h*) in connection with naval or merchant shipping ; (*i*) for procuring the issue of Foreign Office passports ; (*j*) for excusing attendance in Courts of Justice, in the public services, in public offices, or at ordinary employments.

"And whereas it has been made to appear to the General Council from time to time that some registered medical practitioners have given and signed untrue, misleading, or improper certificates of the above specified or other descriptions. Now, therefore, the General Medical Council hereby give notice that any registered medical practitioner who shall be shown to have given any untrue, misleading, or improper certificate, whether relating to the several matters above specified or otherwise, is liable to be adjudged by them to be guilty of 'infamous conduct in a professional respect' and to have his name erased from the *Medical Register* under Section 29 of the Medical Act, 1858."

In order to give you an opportunity to prove to the Council that you realise the gravity of your offence, and to produce evidence from your professional brethren regarding your character and conduct generally, the Council has postponed judgment till the the November Session, when you will be required to produce testimony to the effect above specified, and to your conduct in the interval.

Mr. Benson attended in answer to his notice. He was not accompanied by counsel or solicitor. He tendered testimonials as to his character and conduct generally and in the interval from Sir David Ferrier, M.D., Sir Malcolm Morris, Mr. James Ernest Lane, and Dr. W. H. Willcox. Leave was accorded to Mr. Benson to put in a further testimonial from the Rev. Alfred R. With, M.A., of the Maida Vale School, which had been received too late to comply with the Orders.

Mr. Harper, acting in the absence of a complainant, read Mr. With's letter, and did not desire to place any fresh facts before the Council.

The Council then deliberated on the case *in camerâ*. Strangers having been re-admitted, the Chairman announced the judgment of the Council as follows :—Mr. Alfred Benson, I have to inform you that the Council does not see fit to direct the Registrar to erase your name from the *Medical Register*.

The Counsel considered the case of James Morrison Orr, registered as of Beulah Grove, West Croydon, M.D., R.U.Irel., 1882, who had been summoned to appear before the Council on the following charge :—

"That being a registered medical practitioner you have knowingly associated in practice with an unqualified and unregistered person—namely, one Horatio Franklyn Sparling, and have knowingly authorised or allowed the said Horatio Franklyn Sparling to exhibit a plate at 30 Northcote Road, West Croydon, with the inscription of 'Dr. H. F. Sparling' thereon above a plate bearing your name, and have thereby enabled the said Horatio Franklyn Sparling to attend and treat patients as if he were duly qualified and registered. And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainants were the Medical Defence Union.

Mr. Orr attended in answer to his notice, accompanied by Mr. J. W. Marten, of Messrs. Edridge, Son and Marten, of Croydon, his solicitor. The Medical Defence Union, the complainants, were represented by Mr. W. E. Hempson, their solicitor.

The Council's Solicitor having read the notice, Mr. Hempson laid the facts of the case before the Council on behalf of the complainants. He called Mr. Horatio

Franklyn Sparling as a witness and examined him as to the truth of his declaration and as to the writing on two notification certificates which he put in. Mr. Hempson interposed to ask whether the Council desired him to retain two witnesses as to the accuracy of the transcript of the shorthand writers' notes of the proceedings at the inquest on Harry Stephen Eldridge. Mr. Marten accepted them as accurate, and the witnesses were permitted to withdraw. Mr. Sparling was cross-examined by Mr. Marten and re-examined by Mr. Hempson. He answered questions put to him, through the Chair, by members of the Council, and by the Legal Assessor. Mr. Hempson called Mr. Horatio Osmond Sparling as a witness and examined him as to the truth of his declaration. Mr. Sparling was cross-examined by Mr. Marten. Mr. Hempson did not desire to re-examine Mr. Sparling. This closed the case for the complainants.

Mr. Marten opened the case for Dr. Orr, and examined him as to the accuracy of his statement in answer to his notice. Mr. Orr was cross-examined by Mr. Hempson, and re-examined by Mr. Marten.

Mr. Marten then addressed the Council on behalf of Mr. Orr.

On motion by the Chairman of the Business Committee, Clause 1, Cap. IV., of the Standing Orders was suspended, and the Council agreed to sit till 6.30 p.m., or such earlier time as the case might be finished.

Mr. Marten having finished his address, Mr. Hempson stated that he did not wish to address the Council in reply.

Strangers, by direction from the Chair, withdrew in order that the Council might deliberate on the case *in camerâ*. Strangers having been re-admitted, the Chairman announced the judgment of the Council as follows:—

Mr. Orr, I have to announce to you that the Council have found the facts alleged against you in the notice of inquiry to have been proved, and have directed the Registrar to erase from the *Medical Register* the name of James Morrison Orr.

The Council then adjourned.

THIRD DAY, THURSDAY, NOVEMBER 27TH, 1913.

The Acting President, Mr. Tomes, in the Chair.

On the suggestion of the Chairman of the Business Committee, the Registrar called the roll.

Moved by the Chairman of the Business Committee, seconded by Sir Henry Morris, and agreed to unanimously:—

"That Mr. Tomes, the Senior Treasurer, be requested to take the chair and to act as President for this day's meeting."

(Mr. Tomes in the Chair.)

The Chairman of the Business Committee called attention to a report in *The Times* newspaper of the proceedings in the case of Mr. Alfred Benson, which was inaccurate in regard to the account of the announcement from the Chair of the judgment of the Council in the case, the terms used being those employed in the Standing Orders, and as they appeared in the minutes.

The minutes of the last meeting were then taken as read, and confirmed.

The Acting President read the following message from the President:

"I am deeply touched by the terms of the Council's resolution of November 25th, and send my sincere thanks for the kindly feeling to which it gives expression The assurance of the Council's sympathetic consideration has already contributed to my restoration to health, and to the possibility of further service."

The Council considered the case of Harry Roberts, registered as of 63, Harford Street, Stepney, E., L.S.A. Lond. 1895, who had been summoned to appear before the Council on the following charge:—

"That being a registered medical practitioner you have given, under the Public Health (Tuberculosis) Regulations, 1911, on Form of Notification A, to the Medical Officer of Health for the Metropolitan Borough of Stepney, notices in the four cases following, namely:—

"Alice Peacock, dated July 31st, 1912.

"Dorothy Phillips (or Philips), dated October 1st, 1912.

"Albert (or Albert Edward) Wright, dated December 25th, 1912; and

"Edward (or William Edward) Hartshorn, dated January 22nd, 1913,

all of which notices were untrue, misleading or improper.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainants were the Stepney Borough Council.

Mr. Roberts attended in answer to his notice. He was not accompanied by counsel or solicitor.

The Stepney Borough Council, the complainants, were represented by Mr. Hart, counsel, instructed by Mr. G. H. Young, solicitor.

The Council's solicitor having read the notice, Mr. Hart laid the facts of the case before the Council on behalf of the complainants.

He read the statutory declarations of Mrs. Sarah Peacock, Mrs. Mary Phillips, Mr. Edwin Greaves Fearnsides, M.B., M.R.C.P., and Mr. Herbert Simpson, which he put in together with the original certificates and notifications.

He called Mr. D. L. Thomas, M.R.C.S., L.R.C.P., D.P.H., etc., Medical Officer of Health of the borough of Stepney, as a witness and examined him. Mr. Thomas was cross-examined by Mr. Roberts, and re-examined by Mr. Hart. He also answered questions put to him by a member of the Council through the Chair, and by the Legal Assessor.

Mr. Hart called Mr. T. J. Evans, the Chairman of the Health Committee of the Stepney Borough Council at the time the four cases occurred, and examined him as a witness. Mr. Evans was cross-examined by Mr. Roberts and re-examined by Mr. Hart. He answered questions put to him, through the Chair, by a member of the Council.

This closed the case for the complainants. Mr. Roberts then read his statement in answer to his notice, and statements by Mrs. Peacock, Charlotte Peacock, Mrs. M. Phillips, Mr. H. Draper, J.P., Chairman of the Mile End Board of Guardians, and Mr Edwin H. Kerwin, J.P.

He tendered himself as a witness and was cross-examined by Mr. Hart. He also answered questions put to him through the Chair, by members of the Council.

This closed the case.

The Council deliberated on the case *in camerâ*.

Strangers having been re-admitted, the Acting President announced the judgment of the Council as follows:—

Mr. Roberts: I have to announce to you that the Council does not see fit to direct the Registrar to erase from the *Medical Register* the name of Harry Roberts.

The Council considered the case of Thomas Edwin Roche, registered as of 24, Eden Street, Kingston-on-Thames, L.R.C.P. Edin. 1892, L.F.P.S. Glasg. 1892, who had been summoned to appear before the Council on the following charge:—

"That you abused your position as a medical man by committing adultery with a Mrs. Stuart, whom and whose husband you had been attending professionally, of which adultery you were found guilty by the decree of the Probate, Divorce and Admiralty Division (Divorce) of the High Court of Justice, dated March 4th, 1913, and made absolute on September 17th, 1913, in the case of Stuart *v.* Stuart and Roche, in which you were the co-respondent.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The case was officially brought before the Council by the officials of the High Court.

Mr. Roche attended in answer to his notice, accompanied by Mr. John Percival Hope, solicitor, Cardiff.

The Registrar read the notice.

In the absence of a complainant the Council's solicitor laid the facts before the Council. He first asked permission to amend the notice by inserting after "husband" the words "and household," so that the charge would read:—

"That you abused your position as a medical man by committing adultery with a Mrs. Stuart, whom and whose husband and household you had been attending professionally. . . .

"And that in relation thereto you had been guilty of infamous conduct in a professional respect."

Mr. Hope did not take exception to the amendment of the notice.

The Council's solicitor then called Mr. John Dudley Stuart as a witness, and examined him as to the truth of his declaration. Mr. Stuart was cross-examined by Mr. HOPE.

[On motion by the CHAIRMAN of the Business Committee, Clause 1, Cap. IV. of the Standing Orders was suspended, and the Council agreed to sit until 6.30 p.m.]

The Council's solicitor re-examined Mr. Stuart, who also answered questions put to him by the Legal Assessor and by a member of the Council through the Chair.

On concluding his evidence, Mr. STUART made an appeal to the Council on behalf of Mr. Roche.

The Council's solicitor called Mrs. Roche as a witness and examined her as to the truth of her declaration.

Half-past six having arrived, the Council adjourned.

FOURTH DAY, FRIDAY, NOVEMBER 28TH, 1913.

The Acting-President, Mr. TOMES, in the Chair.

On the suggestion of the CHAIRMAN of the Business Committee, the REGISTRAR called the roll.

Moved by the CHAIRMAN of the Business Committee, seconded by Sir HENRY MORRIS, and agreed to unanimously:—"That Mr. Tomes, the Senior Treasurer, be requested to take the chair and to act as President for this day's meeting."

(Mr. Tomes in the Chair.)

The minutes of the last meeting were taken as read and confirmed.

The ACTING-PRESIDENT asked leave to vary the order of business, and to postpone the resumed hearing of the case of Mr. T. F. Roche till four o'clock p.m., to enable a witness whose examination-in-chief had been commenced yesterday to attend for cross-examination, and also to enable the Council's Legal Assessor, who could not attend before that time, to be present.

Leave was accorded.

Moved by the CHAIRMAN of the Business Committee, seconded by Dr. NORMAN WALKER, and agreed to:—"That the report of the Examination Committee on the communication furnished by the Apothecaries' Hall of Ireland in reply to the resolution of the Council (minutes 1913, 94 (6)) be received and entered in the minutes."

Moved by Dr. NORMAN MOORE, seconded by Mr. HODSDON, and agreed to:—That the following report by the Executive Committee be received and entered in the minues:—Report: The Executive Committee calls the attention of the Council to the correspondence with the Privy Council in regard to the Apothecaries' Hall of Ireland, set forth in the minutes of the Executive Committee of Monday, November 24th, 1913. The petition of the Apothecaries' Hall of Ireland, dated July 7th, 1913, has not been entertained by the Privy Council."

Moved by the CHAIRMAN of the Examination Committee, seconded by Dr. NORMAN WALKER: "That the recommendation of the Examination Committee—viz., 'That the Medical Council direct the Registrar to transmit the above report to his Majesty's Most Honourable Privy Council for their Lordships' information,' be adoped."

After a long discussion an amendment was moved by Dr. ADYE-CURRAN, seconded by the CHAIRMAN of the Examination Committee: "That the question of the legality of the appointment and payment of Dr. Finny be referred to the Legal Advisers of the Council." The amendment was not carried.

On the motion of Dr. ADYE-CURRAN, the names and numbers of those who voted for and against the amendment were taken down, and found to be as follows:—Against 17; for, 8; did not vote, 8; absent, 5. The original motion was then put and carried.

On the requisition of Sir CHARLES BALL, the names and numbers of those who voted for and against the motion were taken down and found to be as follows:—For, 26; against, 2; did not vote, 4; absent, 6.

Moved by the CHAIRMAN of the Examination Committee, seconded by Dr. NORMAN WALKER, and agreed to: "That the report by the examination Committee on the final examinations (July and October) of the Apothecaries' Hall be received and entered in the minutes."

Moved by the CHAIRMAN of the Examination Committee, seconded by Dr. NORMAN WALKER, and agreed to: "That the report of the Examination Committee on the Returns from the Services be received and entered in the minutes."

Moved by the CHAIRMAN of the Examination Committee, seconded by Dr. NORMAN WALKER, and agreed to: "That the report by the Examination Committee on the exemptions granted by British licensing bodies be received and entered in the minutes.

Moved by Dr. NORMAN MOORE, seconded by Dr. LATIMER, and agreed to: "That the nomination of the English Branch Council of Mr. Verrall as a member of the Public Health Committee, in the place of Dr. Lorrain Smith, be adopted."

Moved by the CHAIRMAN of the Business Committee, seconded by Dr. BARRS, and agreed to: "That the following report from the Pharmacopœia Committee be received and entered in the minutes:—'The Pharmacopœia Committee report to the Council as follows: —From May 26th, 1913, to Nov. 18th, 1913, the number of copies of the *British Pharmacopœia* (1898) sold by the publishers was 569. The total number of copies sold in the year beginning November 23rd, 1912, was 978. Up to the present time 45,598 copies of the *Pharmacopœia*, and 4,522 copies of the *Indian and Colonial Addendum* have been sold. Two further sections of the text of the new *Pharmacopœia* have been prepared by the Editors, and have been submitted to the Committee and to the several Committees of Reference. All the sections so prepared have been sent to press, and are at present in type, undegoing revision. It is hoped that the appendix, and the concluding parts of the draft, will be ready for consideration early in the New Year.

Moved by the CHAIRMAN of the Public Health Committee, seconded by Dr. NEWSHOLME, and agreed to: "That the following report from the Public Health Committee be received and entered on the minutes:—

"The Committee had under consideration a formal application which was received from the University of Liverpool asking for the registration of the Degree of Master of Hygiene of that University (M.H.). The Committee was informed by the Dean of the Faculty of Medicine of the University that the curriculum for the Degree of Master of Hygiene extends over two years, and includes all the requirements laid down in the rules of the General Medical Council for diplomas in public health. All the courses of instruction which are required for the diploma in public health are taken by the degree students in the first of their two years' study. In every respect they satisfy the rules of the council.

"The Committee recommend the Council to authorise the registration of the M.H. Degree of the University of Liverpool as a qualification in public health

"The Committee also considered a letter, dated November 8th, 1913, from the Secretary of the Royal Institute of Public Health, asking whether, in the opinion of the General Medical Council, that institute is a 'recognised medical school,' within the meaning of 'rule 3 [or] (2) (i)' of the rules adopted by the Council for diplomas in public health relative to a course of instruction in sanitary law, etc., given by a teacher or teachers in the department of public health of a recognised medical school; and, if not, asking the General Medical Council to add such words to the regulations as will remove any doubt which may arise as to the course or courses of lectures at the Royal Institute of Public Health meeting the requirements of the Council.

"It was suggested that after the words 'medical school' in 'rule 3:—Either (1), (e)' and 'rule 3:—or (2) (i.)' the following, or similar, words should be inserted, 'or in a recognised public health institution.'

"The Committee resolved to ask the Council to allow it to consult the legal adviser on the question of amending the rules for diplomas in public health as suggested, and on the general hearing of such an amendment or amendments."

Moved by Sir John Moore, seconded by Dr. Newsholme, and agreed to:—"That the recommendation of the Public Health Committee be adopted, viz.:—'The Committee recommend the Council to authorise the registration of the M.H. Degree of the University of Liverpool as a qualification in public health.'"

Moved by Sir John Moore, seconded by Dr. Newsholme, and agreed to:—"That leave be accorded to the Public Health Committee to consult the Legal Adviser on the question of amending the rules for diplomas in public health as suggested, and on the general hearing of such an amendment or amendments."

Moved by Dr. Norman Moore, seconded by Dr. Mackay, and agreed to:—"That the report by the Students' Registration Committee be received, entered in the minutes, and approved."

The Council resumed the consideration, adjourned from Thursday, November 27th, of the case of Thomas Francis Roche, registered as of 24, Eden Street, Kingston-on-Thames, L.R.C.P.Edin. 1892, L.R.C.S.Edin. 1892, L.F.P.S.Glasg. 1892.

Mr. Roche attended in answer to his notice, accompanied by Mr. John Percival Hope, his solicitor.

In the absence of a complainant the Council's solicitor laid the facts before the Council. He resumed the examination of Mrs. Roche as to the truth of her declaration. She was cross-examined by Mr. Hope. The Council's solicitor did not desire to re-examine Mrs. Roche, who answered questions put to her by the Legal Assessor and by the Chair. The Council's solicitor put in two letters referred to in the evidence given on the previous day—viz., from Mr. Stuart to Mr. Roche, and Mr. Roche to Mr. Hope. This closed his case.

Mr. Hope then called Mr. Roche as a witness and examined him as to the accuracy of the statement which he sent in answer to his notice. Mr. Roche was cross-examined by the Council's solicitor, and re-examined by Mr. Hope. He put in letters from Major-General H. R. Lee, Mr. Thomas Wallace, Senior Consulting Surgeon of the Cardiff Infirmary, Mr. Ivor V. Downing, solicitor, the Rev. G. H. Jennes, Rector of Wenvoe, the Rev. H. J. Williams, formerly Rector of Dinas Powis, the Rev. Charles M. Schooling, of Surbiton, Miss L. Powell, "Lady-in-Charge" of the Factory Girls' Club, Kingston-on-Thames, and Mr. W. J. Kestell, of the Ynishir Steam Coal Co., in business in Cardiff.

Mr. Roche answered questions put to him by the Legal Assessor and by members of the Council through the Chair.

Mr. Hope called Mrs. Florence Emily Stuart as a witness, and examined her as to the accuracy of her declaration. She was cross-examined by the Council's solicitor and re-examined by Mr. Hope. She answered a question put to her by the Legal Assessor. Mr. Hope called Mr. Arthur Edward Hunter, and examined him as to the accuracy of his declaration. He was cross-examined by the Council's solicitor. Mr. Hope then addressed the Council on behalf of Mr. Roche. The Council's solicitor addressed the Council in reply.

Strangers, by direction from the Chair, withdrew in order that the Council might deliberate on the case *in camerâ*. Strangers having been re-admitted, the Acting-President announced the judgment of the Council as follows:—

Mr. Roche: I have to announce to you that the Council do now judge Thomas Francis Roche to have been guilty of infamous conduct in a professional respect, and do direct the Registrar to erase from the *Medical Register* the name of Thomas Francis Roche.

The Acting-President announced that the Council would meet at 11 a.m. on the following day.

The Council then adjourned.

FIFTH DAY, SATURDAY, NOVEMBER 29th, 1913.

Mr. Tomes was appointed Chairman for this meeting.

The Council considered the case of John Edward Sang, registered as of 330 New Cross Road, London, S.E., L.R.C.P.Edin. 1889, L.R.C.S.Edin. 1889, L.F.P.S.Glasg. 1889, who had been summoned to appear before the Council on the following charge:—

"That being a registered medical practitioner you were at the General Session holden at the Central Criminal Court on September 2nd, 1913, convicted of feloniously and unlawfully using certain means unknown with intent thereby to procure miscarriage and sentenced to twelve months' imprisonment with hard labour."

The name of John Edward Sang was directed to be erased from the *Register*.

The Council then considered under Standing Orders XVI., 2, the case of Ralph Raby, formerly holding the qualifications of M.R.C.S.Eng. 1903, L.R.C.P.Lond. 1903.

Mr. Raby was removed from being a member of the Royal College of Surgeons of England on April 10th, 1913. (Executive Committee Minutes, May 26th, 1913, p. 26.) His licence was withdrawn by the Royal College of Physicians of London on October 30th, 1913. (Executive Committee Minutes, November 24th, 1913, p. 53.)

The Registrar had been informed by both of the Colleges that the qualification had been removed in consequence of the issue of objectionable advertisements and not on the ground of his having adopted any theory of medicine or surgery. (Medical Act, 1858, Sec. 28.)

The Executive Committee recommended that in pursuance of Standing Order XVI., 2, and the powers of the Medical Act., 1858, the Acting-President should put from the Chair a resolution to the effect that Mr. Raby's name be removed from the *Register*.

The Standing Order XVI., 2, read as follows:—"If, under the direction of the Council, all the qualifications of any registered medical practitioner have been erased from the *Medical Register*, then the Council shall, if it thinks fit, by formal resolution put by the President from the Chair, direct the Registrar to remove the name of such practitioner from the *Medical Register*."

The name of Ralph Raby was directed to be removed from the *Register*.

The Council received a report from the National Health Insurance Act Committee, *in camerâ*.

On strangers being re-admitted the Registrar read three letters dealing with objectionable methods of advertising and of canvassing with the object of procuring the enrolment of insured persons as the patients of particular medical practitioners, and with the advisability of calling the special attention of all Insurance Committees, Local Medical Committees and Approved Societies and institutions to the warning notices published by the G.M.C. on June 6th, 1889 and December 1st, 1905, and which are still operative.

Mr. Verrall was asked to see the Insurance Comsioners.

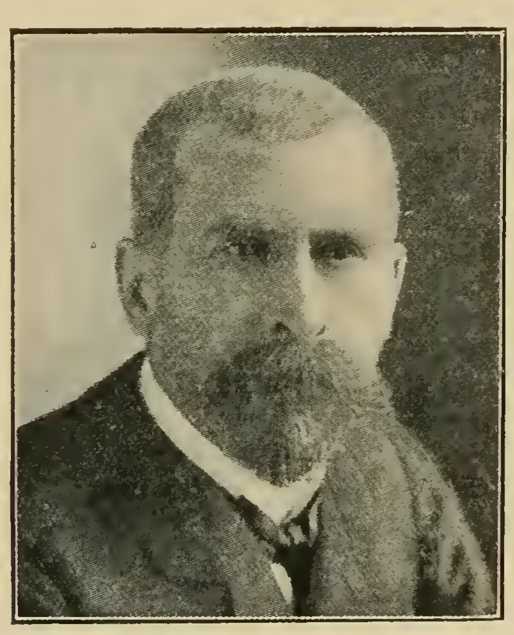
Motion of Sir John Moore, seconded by Mr. Pye Smith, and carried: "To amend the Warning Notice relating to 'Certificates' as follows: (i.) in the preamble to the notice, after the word 'certificates' insert the words 'or notifications or documents of a similar character.' (ii.) In the list of 'Certificates' after (*j*) insert '(*k*) Under the Notification of Infectious Diseases (1889) Act, the Infectious Diseases Prevention Acts of 1890 and 1896, and in regard to the Notification of Tuberculosis.'"

A vote of thanks to the Acting-President was carried by acclamation.

The Council rose.

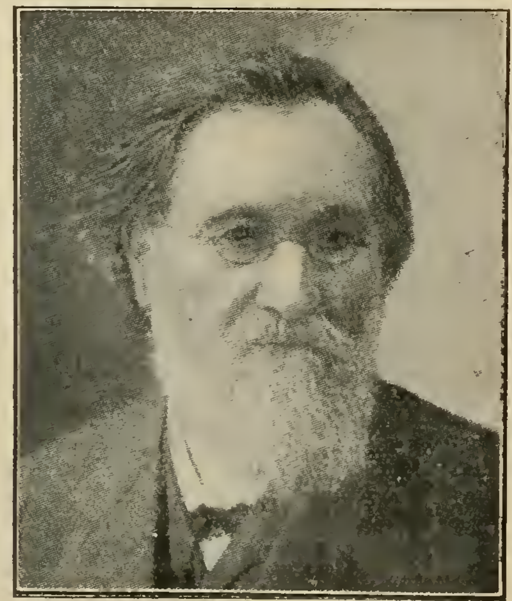
THE TWENTY-FIFTH ANNIVERSARY OF THE PASTEUR INSTITUTE.

A quarter of a century is but a short span in the history of science, though it forms a large portion of the life of an individual. It was on the 14th of November, 1888, that the Pasteur Institute in Paris was opened by President Carnot, and it was appropriate that the twenty-fifth anniversary of this event should have been duly honoured by a commemoration festival in which the present President of the French Republic took part. Through the courtesy of our esteemed contemporary, *Le Paris Médical,* we are enabled to reproduce below the photographs of the two distinguished Directors of the Institute, Professor Roux and Professor Metchnikoff, both men whose names are a household word in medicine.



Professor Roux.

In reviewing the history of the Pasteur Institute, one stands amazed at the immense amount of work and scientific research into the problems of medicine and bacteriology undertaken during the years of its existence, notably in serotherapy, phagocytosis, immunity, arsenical treatment of syphilis, protozoal disorders, sleeping sickness, etc. The science of chemistry as an ally of medicine has taken a large place in the affairs of the Institute, and from its magnificently equipped laboratory there emanates a constant stream of healing for the benefit of the whole world, in the shape of antirabic serum alone. The teaching of bacteriology and hygiene forms another important department of the work of the Institute, and in the latter direction it constitutes the first adviser of the State. True progress in medicine can only be attained by the union of the laboratory with the clinic. The hospital of 80 beds in connection with the Institute, with Dr. Louis Martin as Physician-in-Chief, is an illustration of this axiom. The establishment of research laboratories attached to hospitals or to private clinics, civil or military, throughout the civilised world is an eloquent testimony to the fame of the Pasteur Institute, whose first apostle was our own Lister. For therapeutics to succeed in the fight against disease it must have the support and the collaboration of the clinic as well as those of every science allied to medicine. Thus it has come to pass that the Pasteur Institute has become a veritable medical University.



Professor Metchnikoff.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 29th, 1913.

Colloidal Sulphur.

Prof. Robin advocates the treatment of chronic rheumatism by colloidal sulphur, sulphur being a fundamental element of our tissues. He has treated thus, successfully, several patients affected with rheumatism deformans. One patient who was bedridden for three years from polyarthritis was able to move about at the end of three months. He was not completely cured, it is true, but he could go downstrairs and attend to his little wants.

Colloidal sulphur is, further, one of the best agents against the nocive products of the intestine, rendering them inoffensive.

From time immemorial sulphur has been employed for cutaneous diseases and certain varieties of bronchitis, but the result is perhaps more positive in chronic rheumatism where the tendons and ligaments containing normally sulphur, seem to be deprived of that essential element. The solution, prepared by Dr. Maillard, contains 4 gr. of colloidal sulphur per tablespoon. The initial dose would be a teaspoonful twice a day before meals, but it can be progressively increased to a tablespoonful.

M. Robin employs conjointly moist compresses with lead lotion, massage and progressive mobilisation of the joints.

Treatment of Boils.

The treatment of boils is rendered very simple by the application of tincture of iodine and' ichthyol. Where the boil has suppurated the surface is painted with tincture of iodine and an incision made in the centre of the little tumour. After the pus is evacuated, ichthyol ointment is applied and the parts covered with a suitable dressing. The following day the ichthyol is removed and the surface again painted with iodine, and so on until the secretion has ceased, when the iodine is replaced by pure ichthyol.

Where the boil is hard, and has not yet reached the suppurative stage, the same application of iodine is made and followed by pure ichthyol, which is left to dry (20 minutes); no dressing is required. The next day the ichthyol is removed with soap and hot water and the iodine put on, and so on for two or three days, when the iodine is suppressed and the ichthyol continued for three days more.

Solid Carbonic Acid.

The only difficulty to be encountered in the use of the solid carbonic stick is how to determine the exact duration of the application and the degree of pressure to be exercised, for on these two factors depends the success of the treatment.

In general, one may obtain with from five to ten seconds simple dermatitis; with ten to fifteen seconds, redness, swelling, or even bulla; with twenty to thirty seconds a slight cicatrix is obtained; with from fifty to sixty seconds, large bullæ, sloughing and whitish cicatrix. From ten to thirty seconds would seem to be the limit, in any case it is useless to exceed a minute. A certain degree of pressure is required, for it alone provokes congelation. Young subjects react more readily than adults, fair persons than dark ones.

The chief indications of the treatment are: acne rosacea, superficial angioma, trachoma, corns, chronic eczema, superficial epithelioma, hæmorrhoids. In lupus the carbon pencil can only be an adjuvant to other treatment, as its action is insufficient. For nævi, especially with hairs, the results are excellent; the duration of the application is thirty seconds with moderate pressure.

Fresh patches (small) of psoriasis can be cured in one application. For warts the solid carbon is very effectual, the surface of application should extend a little outside the excrescence.

GERMANY.

Berlin, Nov. 29th, 1913.

At the Society f. Inner Medizin and Kinderkrankheiten, Hr. Kayser showed a case of

Syphilis of the Lungs.

The case was that of a boy, æt. 12, who came under observation on account of complaint of pain in the abdomen and constipation. On examination it was seen that the boy had perforation of the hard palate, and almost complete destruction of the soft palate. On examining the chest infiltration was found in a spot corresponding to the middle lobe of the right lung, the infiltration was confirmed by X-ray examination. The disease was hereditary syphilis from which the child had been suffering from his sixth year. With the exception of the expectoration there were no other outward signs of lung mischief. Anti-syphilitic treatment had been successful in effecting retrogression of all the symptoms.

Hr. A. Fraenkel observed that there were both a gummatous and a fibrinous form of syphilis of the lungs. The case shown was distinctly one of the gummatous kind as the fibrinous form was neither visible by the Röntgen rays nor could it be much influenced by treatment.

Hr. Umber read a paper on

Intermediate Disturbances of Tissue Change.

He said that under normal conditions in the disintegration of albuminous substances introduced into the system in the food there were a number of intermediary "between" products before that of the amino acids was reached. New albuminous products were built up out of these foundation stones. In case of illness due to disturbances of tissue change there were disturbances in the process of disintegration. An insufficiency of disintegration, and a faulty synthesis were possible, and possibly processes that were dependent on anomalies of the internal secretions, for example disease of the hypophyses. An abnormal disintegration of albumen might lead to quite distinct clinical forms of disease. Alcaptonuria and cystinuria were affections that were due to insufficiency of disintegration of albumen. The speaker had repeatedly had the opportunity of studying both forms of disease.

In alcaptonuria, homogentisine and uroleucine acids appeared in the urine. The existence of the latter had repeatedly been called in question, but the speaker had met with a body in the urine in two cases which was certainly not identical with homogentisinic acid. Alcapton urine was, as was known, dark, gave a positive reaction with Trommertes' test and a negative one with Nylander's. Homogentisinic acid gave a transient green colour with chloride of iron. The statements of patients were very characteristic that their linen was stained black in patches. Excretion of homogentisine was dependent on incorporation of albumen. No homogentisine could be found in the blood serum. Ochronosis of the cartilages was very typical of the disease. The nasal cartilage had a blue sheen, the ear cartilage a discoloured appearance, and in consequence of an affection of the cartilages severe osteoarthritis deformans might be set up. Alcaptonuria was therefore by no means a harmless affection. In the cases observed there were also brownish blue flecks on the sclerotic, the tragus of the ear was dark brown, and a green-blue discoloration could be seen under the axilla in the sebaceous glands. The case observed belonged to an alcaptonuric family.

Cystinuria depended essentially on a calculus-forming diathesis. The history of a case was related—that of a man, æt. 42, who came of a strongly diabetic family and suffered from renal colic of the left side. When increased quantities of albumen were given the excretion of cystine also increased. It disappeared also when albumen was withheld from the food.

Hr. Rothmann drew attention to a case of osteitis deformans ochronotica by Sonderberg.

Hr. Hirschfeld related a case of cystinuria in a diabetic in whom after an attack of nephritis no more cystine was observed in the urine.

Hr. Magnus Levy mentioned the case of a cystinuric who was very sensitive to albumen. When it was given to any amount the patient always reacted with fever.

At the Hufelandsche Gesellschaft, Hr. Strauss communicated a note on

Errors of Diagnosis from the Employment of X-Rays.

He said these were due partly to faulty *technique*, and partly to the observer himself. The errors on the part of the observer were mostly in connection with hour-glass stomach, in cases of ulcer of the stomach, which later operation showed had no existence. Spastic hour-glass stomach was a rarity. It might be simulated by the colon being pushed over the stomach. The speaker expressed himself in regard to the frequency of Haudeck's niche. As regarded the appearance of vacuoles in carcinoma they might be simulated by some of the contents of the colon lying in front of the greater curvature.

AUSTRIA.

Vienna, Nov. 29th, 1913.

Radio-therapy of Malignant Growths.

The ever-fertile subject of the treatment of malignant neoplasms has again been the subject of a valuable and interesting communication by Dr. Leopold Freund, who discusses very thoroughly the relative efficiency of radiation treatment and of surgical procedure. He holds a very high opinion of the efficacy of radiotherapy when adopted at an early stage of the development of malignant growths, and strongly advocates its eligibility in the treatment of the same—at a period prior to the evidence of transmission along the lymphatics and blood-vessels, and before any extensive infiltration of the surrounding tissues and organs has become manifest. In cases of very advanced or recurring malignant affection from which extensive infiltration processes have already spread themselves, and where metastatic deposits have formed in distant organs, the therapeutic effect of the radium rays can be calculated on only when emitted from a source so intensive that they can effect the destruction of cancerous tissues after passing through half the thickness of the patient's body. Such a source can, at least from the theoretical viewpoint, effectively deal with all neoplastic growths, when successively applied from opposite sides of the body. In employing so powerful a source of radiation, care must, of course, be taken to filter the rays so effectively that the sifted product can be surely relied on to affect carcinomatous tissues only, without exercising any deleterious effect on the healthy ones. When this conditional postulate can be fulfilled, we can rely upon radio-therapy as an absolutely efficacious curative agent in dealing with malignant neoplasms. But when this condition cannot be attained—as, for instance, when the radiations have but too narrow a range of destructive efficacy—the radio-therapy of cancer can only be regarded as an elegant æsthetic and painless, but, at the same time, merely palliative, method of evacuating foci of cancerous growth—in which the surviving germs will surely produce, after an interval of either short or long duration, a recurrence of the growth; with a progressive development often much more rapid in course, and destructive in character, than the original one had been. The procedure may have a permanently destructive effect on some specimens of malignant growth when adopted at an early stage; also on others which can be quite definitely localised. But the medical man can never positively guarantee a permanently successful result, as he can never be absolutely certain of the extent to which the primary focus has sent out its infiltrating ramifications into the adjacent tissues, or in what proportion its floating germs have passed into the general circulation through the lymphatics and blood-vessels. Even after having secured what appears to be a most happily successful result, he should always hesitate before announcing the achievement of a "perfect cure." Even in parts in which the healing had remained to all appearance perfect for a period of four years after the successful application of the rays, local recurrence has taken place. And even with the complete and permanent healing of a local malignant neoplasm, the object of the practitioner is not attained with the desired certainty. For in some cases in which the application of radiotherapy had a local result which remained permanently perfect, the cancerous disease has appeared, after an interval of years, in parts previously healthy. For instance, mammary carcinoma has appeared in the other breast, Kaposi's sarcoma idiopathicum in other parts of the skin. The previous surgical removal of the pathological tissues must also increase the chances of a successful radiotherapy of internal neoplasms. Thus, it increases the effective results of the application of a weaker preparation, especially when this preliminary treatment has been adopted in an early stage of the morbid growth. It should also be borne in mind in this connection that in deciding what manner of surgical procedure should be adopted in those cases, one should be chosen which will not lead to the formation of thick cicatrices, or the projection of voluminous masses of dense tissue anterior to the original morbid growth. The usual milligramme dosage can have no greater scientific value than this ascribed to it. The radiation dosage to be adopted at each application should be calculated with an eye not only for the quantity of radium employed, and the time limit of the exposure, but also for the quality of the rays with regard to the process of filtration, the superficial and deep limits of the extent of the morbid growth, and the histological and physical characteristics of the latter.

Treatment of Functional Pancreatic Achylia.

Drs. Tibor v. Kern and Emmerich Wiener (of Budapest) have published their clinical experiences of the therapeutic efficacy of pilocarpine and other remedies in the treatment of functional pancreatic achylia. Asthenia with emaciation and diarrhœa, which obstinately resisted ordinary astringent remedies, were prominent symptoms. Their best therapeutic results were obtained from the combined administration of pilocarpine and acidol-pepsin tabloids, which had the effect of controlling the diarrhœa and increasing the body weight.

HUNGARY.

Budapest, Nov. 29th, 1913.

The Differential Diagnosis of Basedow's Disease.

About three years ago Dr. Kraus (Germany) called attention to sudden attacks of intense pain in the upper abdomen and to increased radiation of heat as signs of possibly latent exophthalmic goitre. Dr. Balint, Lecturer to the Budapest University, investigated how far these signs may be regarded as characteristics of Basedow's disease. In two of the most typical of his cases the abdominal pain came on suddenly, resembling gall-stone colic or the crisis of tabes, and was so intense that only large doses of morphine could control it. The iliac plexus was tender, but not the gall-bladder region. The attacks did not correspond to ingestion of food; they came on generally at night, and application of cold or heat gave no relief. The pain was ascribed at first to spasm of the abdominal vessels, and drugs to act on the kidneys were given, but without effect. One patient also had the typical "giving way of the legs" sign of exophthalmic goitre, but there was no paralysis; the extensors of the knees gave way completely all at once, and the patient required aid to get up from the kneeling posture. The very severe acute condition in the other patient had evidently been aggravated by local application of iodine. After exclusion of all other causes for the pain, nothing was left but the assumption of action on the solar plexus of the toxin causing the exophthalmic goitre. In a third case, a man of 28 had suffered for seven years from mild exophthalmic goitre, which was finally aggravated by overwork. Then attacks of pain came on in the night, accompanied by vomiting.

In a fourth case the spasmodic pain was the first symptom of trouble. A man of 52 was suddenly attacked with violent abdominal pain—neuralgia as he supposed. The pain persisted, and he lost 10 kilos in weight in two weeks, and by the end of the month his weight had dropped from 80 to 60 kilos. Several courses of sanatorium treatment brought no relief. By the end of three months symptoms of exophthalmic goitre developed, including restlessness, insomnia, palpitations and pains in the shoulders, but the appetite remained good. On suspicion of "Basedowoid," he was given antithyroidin, and the pains gradually subsided under this and hydrotherapy, with application of the continuous current to the neck. The Basedow triad since has become more pronounced, but the general health has improved and there has been no recurrence of the abdominal pains. Another important sign of hyperfunctioning of the thyroid is the increased radiation of heat from the skin. The temperature in the axilla is liable to be as high as that in the mouth, or even a trifle higher. The burning skin, with otherwise latent exophthalmic goitre may suggest latent tuberculosis. Cardiovascular neurosis may simulate exophthalmic goitre, but the lack of rapid drop of weight speaks against the latter. Hyperthyroidism may induce a condition resembling chlorosis, and during menopause disturbances may develop suggesting the Basedow triad. This borderland disturbance deserves special attention, Balint remarks, as the prevailing tendency to give iodides in prophylaxis or treatment of arterio-sclerosis is liable to induce these nervous disturbances or aggravate a latent tendency of exophthalmic goitre. Another sign of hyperfunctioning of the thyroid is the tendency to frequent and copious stools. This sign is particularly instructive when individuals long constipated suddenly find bowel functioning becoming regular as other signs of hyperfunctioning on the part of the thyroid develop. In all dubious cases the scale is turned by the disproportion between an abundance of nourishing food and the progressive decline in the body weight.

Typhoid Fever in Children.

Dr. Flesch Gustav discusses the points in which typhoid in children differs from that disease in adults. He feeds the child with milk, broth and raw yolks of eggs, with a little wine during the entire febrile stage and convalescence. He thinks the wine is important to keep up the general nutrition. He warns in particular to be on the watch for otitis. The child's heart can be depended on much more than the heart of the adult, and drugs are seldom necessary for disturbances in the heart action, but too much attention cannot be paid to prevention of boils and other disorders of the skin, as secondary septic infection may have most serious results.

Surg.-Lieut.-Col. Henry Walter Kiallmark, M.R.C.S., of The Elms, Ditchling, Sussex, late of the Royal Bucks Hussars and the Army Medical Reserve, and Staff Surgeon to the Ottoman Army, who died on October 23rd, aged 80, left estate of the gross value of £17,156, of which £17,094 is net personalty.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Mileage Grant under the Insurance Act.

Copies of the scheme framed by Commissioners and approved by Treasury for the distribution of the Parliamentary grant in aid of mileage in sparsely populated districts (exclusive of the Highlands and Islands) have now been issued to panel practitioners. The sum of money available for the Lowlands is £16,000. The Commissioners will ascertain the amount of the grant applicable to each county. The basis of the allotment consists in returns received from insurance practitioners, the population and character of the district, and local information furnished by road surveyors, chief constables, and clerks to insurance committees. The Insurance Commissioners believe that they have apportioned the money equitably on these data. The grant is limited to mileage in sparsely populated districts, and account has not been taken of insured persons resident within three miles by land of the nearest insurance practitioner. Special allowance has been made in respect of insured persons whose residence can only be reached by footpath, across moorland or by water. The grants will be made immediately, subject to a balance retained in order that the Commissioners may ascertain how far it is necessary to make allowances for (1) temporary residents, (2) persons becoming insured since April 12th, 1913, (3) geographical and other special difficulties in regard to mileage in any area, and (4) members of the Seaman's National Insurance Society. Under the scheme the Committees shall distribute the grant among the panel practitioners on the basis of one unit for every mile of normal mileage (*i.e.*, distance along a driving road), two and a half units for every mile of special mileage (*i.e.* distance along a road not used for vehicular traffic or across moorland), and four units for every mile of water mileage. In distributing the sum the Insurance Committee may take into account any special circumstances of their area, and vary the scheme accordingly, but the total sum distributed shall not in any area exceed that payable to the Committee by the Commissioners.

Medical Benefit under the Insurance Act.

The immediate distribution of a sum of £17,000 or £18,000 among a body of two or three hundred gentlemen is naturally a subject of lively interest to those immediately concerned, who are anxious to know on what principle or principles the money is to be allocated among them. The Glasgow Insurance Committee has at present this question under consideration of its sub-committee on medical benefit. It is involved in the question of the allocation, among the panel doctors whose lists are not already full enough, of those fifty thousand insured persons who have not made choice of doctors to attend them. When the allocation is made, each practitioner will start with a cash payment as a free bonus, and with his list of insurance patients augmented; it may be doubled, trebled or increased in almost any ratio, so various are the numbers presently on the lists of panel practitioners. It is not to be wondered at that the Insurance Committee have felt some difficulty in fixing the principles on which the allocation is to be carried out. To distribute the unallocated patients among those practitioners who have less than 1,500 on their lists might be unfair to the practitioner who has attracted patients, and in some cases might put a premium or incompetence. On the other hand, some maximum must be fixed; indeed, the error seems to have lain in not fixing a maximum at the beginning—sufficiently generous to allow as free a choice of doctors as possible to all insured persons. To take into consideration—as has been proposed—each doctor's public appointments and present private practice apart from the Act, is scarcely practicable for the Committee. The fairest way would seem to be to allocate those now to be apportioned among the doctors in proportion to their present lists, but so that no list above, say, 2,000, be added to, nor any list be raised above that number.

Glasgow Western Infirmary.

The annual report of the Western Infirmary for the year to October 31st has been issued by the directors. From this it appears that there was a deficiency of £19,305 in the ordinary revenue, and on the basis of this fact the directors make a strong appeal to the public for increased annual contributions. Luckily, on the head of extraordinary income, arising from legacies, donations, etc., there was a balance sufficient to wipe out the above deficiency and to enable the directors to carry £904 12s. to capital account. The number of indoor patients treated during the year was 9,391, and of outdoor 30,935. Of the indoor patients 2,077 were medical, 6,434 surgical, and 318 gynæcological. The infirmary contains about 600 beds, of which 43 have been endowed in perpetuity, mostly in memory of deceased relatives of the persons who have endowed them. At October 31st 700 patients were awaiting admission. In moving the adoption of the report at the annual meeting of qualified contributors on November 27th, Lord Provost Stevenson, who presided, pointed out a gratifying feature in the report—namely, the increase shown in workmen's subscriptions, notwithstanding the Insurance Act. This he took to be an argument in favour of his view that the Infirmaries should be placed upon the rates for support. It showed that compulsory contributions would not, as had been contended, dry up the "fountains of charity." Hospitals were State-supported in France and Germany, where also they had paying wards. Lord Dean of Guild Roxburgh, in speaking afterwards, said that the directors had under consideration the question of introducing paying wards.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

COLOUR DANGERS.

To the Editor of The Medical Press and Circular.

Sir,— In a paragraph on the above subject in The Medical Press and Circular for November 26th, it is stated that for signals at sea and on railways "the colours chosen" (red and green) "are about the worst possible," and that these colours are "the most apt to be confused"; that "about one man in 25 has a deficient colour sense, and by far the most common deficiency is an impaired susceptibility for red."

A series of statements which are so contrary to the facts are seldom seen together, and if the writer finds that he confuses red and green it simply proves that he is colour blind, and cannot consequently be considered capable of giving an opinion on such a subject. It is true that red and green are very apt to be confused by the colour blind, but these colours are by far the least liable to be confused by the normal sighted, and therefore anyone who cannot easily distinguish them ought never to be allowed in a service in which colour signals have to be read. So far from only one man in 25 being deficient in colour sense, the real numbers are from 20 to 25 per cent. who are below normal standard, but comparatively few of them have an error which would allow them to mistake red for green, or the reverse, and so their error is of no practical significance.

The crowning point is reached, however, when the writer states that "blue and yellow would be much more suitable colours from every point of view," and he asks whether "it is beyond the limits of possibility that they will be adopted." I can only say that I trust it is beyond those limits. Does he not know that the masthead lights and the stern lights of all ships under way are "bright" (that is yellow), and that every ship at anchor has a "bright" light on her forestay? Owing, however, to their position, these lights are always easily distinguishable. Does he not remember that all cabin and deck lights are "bright"? If now a "bright" light be substituted for the port or red light, how does he expect the much harassed mariner to distinguish it from the crowd of "bright" lights which renders the modern liner at night precisely like a floating hotel? Has he ever considered the fact that in a fog the first rays to be cut off are the violet and blue? A red light is visible in a fog dense enough to have rendered a blue light invisible at about a quarter the distance, and the very last rays to be cut off are the red ones. To realise this one has only to look at the sun on a foggy day to see that it is the red rays only which can get through, and that the sun and all lights which have any red rays in them will become red before they disappear as the fog gets thicker and thicker, until at last these also are lost. Yellow rays penetrate the next best, and green the next, and these three colours are those which are almost universally used for signals. It is a well-known fact that the electric arc light does not penetrate well in a fog, for in spite of its intense brilliancy it is deficient in red rays compared with the yellow-coloured flame of gas or oil, and for this reason, among others, it is not so universally adopted for lighthouses as it otherwise would be. Accidents at sea happen all too frequently as it is, but there is no need to make things worse by getting rid of red and green lights, which no person with normal vision could possibly confuse or mistake.

I am, Sir, yours truly,
C. Devereux Marshall.

Harley Street, London, W.
November 29th, 1913.

MEDICAL MEN AND LAY PRESS NOTICES.

To the Editor of The Medical Press and Circular.

Sir,—Could you spare a few lines of your valuable space to allow me to direct the attention of your readers to the following from to-day's *Daily News* with reference to the illness of Miss Elizabeth Asquith :—

"The operation was arranged for yesterday morning. Sir Watson Cheyne (who had meantime been to Reigate to perform another operation) called at 10 Downing Street against last evening."

I do not suppose for a moment that Sir Watson Cheyne inspired this paragraph, but it has struck me that if similar detailed information had appeared about some ordinary individual like myself the General Medical Council might have wanted to know the reason why.

I am, Sir, yours truly,
M.A., M.D.Cantab.

London.
December 1st, 1913.

[Surely the Press is alone responsible for this sort of rubbish. How is it to be stopped? The General Medical Council would hardly interfere in any sort of Press notice—otherwise the recent manifesto on the Royal Commission might have produced interesting results.—Ed. M.P. and C.]

OBITUARY.

DR. CLEMENT GODSON.

We regret to announce the death of Dr. Clement Godson, of Sharsted Court, Westgate-on-Sea, and formerly of Brook Street, which took place last week at Montagu Mansions, Portman Square, W.

The deceased, who was 68 years of age, was the eldest surviving son of the late Mr. Charles Godson, F.R.C.S. He was educated at King's College School, London, went to Aberdeen University, and entered St. Bartholomew's Hospital. He became M.D.Aberd. in 1874, and he was elected M.R.C.P.Lond. in the same year. Soon afterwards Dr. Godson was appointed to the newly-created office of assistant Physician-accoucheur to St. Bartholomew's Hospital, a position which he held for over sixteen years. He was examiner in obstetrics in the Universities of Aberdeen and Durham, President of the British Gynæcological Society, and he was also consulting physician to the City of London Lying-in Hospital and other institutions, and formerly physician to the Samaritan Free Hospital for Women and Children. He was the author of numerous articles on puerperal diseases and other subjects in "Quain's Dictionary of Medicine."

Dr. Godson was a vice-president of the League of Mercy and Hon. Surgeon-Colonel of the Royal Army Medical Corps, Territorial Branch, and Officer Commanding the 2nd London (City of London) General Hospital (Territorial Force), and the Volunteer Decoration had been conferred upon him. He was a member of the Court of Shipwrights' Company, and of the Junior Carlton Club. He married Alice, the second daughter of the late Rev. Robert Biscoe Tritton, rector of Bognor, by whom he had four sons and four daughters.

REVIEWS OF BOOKS.

RECENT WORKS ON DENTAL SURGERY AND ANÆSTHETICS.

This work (*a*) has been modelled upon the recently revised syllabus of the Royal College of Surgeons (England), which certainly seems free from errors of omission. The need for a competent dentist to have some idea of the general principles of surgery is obvious, and it becomes more and more evident that he should also beware of many disorders not at first sight connected with his special work, and be able to recognise signs and symptoms which may indicate the need for further advice; but a little knowledge of their differential diagnoses and of their treatment will be the sort of knowledge which is proverbially dangerous, and we do not think it should be expected of him. Nor can we understand why a dental student should be required to learn anything at all about dislocation of the shoulder, cut throat, varicose veins, and many of the other conditions specified, although it must be admitted that the difficulty of deciding what may be safely omitted from the curriculum is a considerable one. The authors have as a rule borne well in mind the special requirements of those for whom they write, and the chapters on bacteriology and on oral sepsis are especially good. To the use of antiseptics and the processes of sterilisation only a short allusion is, however, made in the opening chapter, whilst later on the operator is told to sterilise the patient's skin, etc., "in the usual way." Throughout there is a good deal of the scrappy information just deprecated, but for its inclusion the examiners, rather than the authors, may be responsible. For instance, the application of a tourniquet, or even an attempt to remove a foreign body from the nose, on the brief instructions given, can hardly lead to anything but disaster, and one cannot see any good to the dentist or his patients in the former knowing a little—a very little—about treatment of gangrene of the foot, or of a suppuration of a frontal sinus, or of glaucoma.

A few minor errors may be mentioned, as a further edition will no doubt be required. When reference is made to a figure on another page (as on page 3), the number of that page should be given. "Brawny" (page 43) should be "branny," and "down" (page 252, line 6) should be "up." We prefer "tuberculous" to "tubercular," and "fomentated" (page 41) is novel. "A certain" (which generally means an *un*certain) "degree" occurs rather too often, and there are some tautological expressions, such as "separates off" (page 54), "hard bullets" (page 78), "hoarseness of the voice" (page 243). We have looked in vain in the index for "alveolar abscess," "sinus," "sterilisation"; and "frontal sinus" is given as on page 253 instead of 254. The book is very well printed, and on the whole the authors and publishers are to be congratulated.

This small book (*b*) exemplifies still more the difficulties to which we have already referred, for the issues involved are constantly serious. As it is said, "a medical man," or preferably a skilled anæsthetist, should unquestionably be engaged for any long or severe dental operation, and therefore we think it would have been better if consideration of anæsthesia

---

(*a*) "Surgery for Dental Students." By G. Percival Mills, M.B., B.S., F.R.C.S., and H. Humphreys, M.B., Ch.B., B.D.S., L.D.S. London: Edward Arnold. 1913. Price 12s. 6d. net.

(*b*) "Dental Anæsthetics." By W. E. Alderson, M.D. With a Section on Analgesia, by J. Bolam, L.D.S. Second edition. Bristol: John Wright and Sons, Ltd. 1912.

in such cases had not been attempted. The accounts of the more dangerous anæsthetics are necessarily so brief as to be of little use (supposing that a dentist should ever administer them) whilst some of the personal opinions expressed may lead to troublesome contentions. We agree, however, that chloroform is particularly dangerous for dental operations, and may add that as surgical shock (unlike psychic shock) is not abolished by full anæsthesia, no severe one should be done in a dentist's room, if other arrangements are possible. The accounts of nitrous oxide as usually given, and of the nasal method, are fairly good, but minor difficulties might be more fully considered. Cardiac failure follows commonly respiratory obstruction, rather than respiratory failure, under such circumstances, and it is important that this should be realised by students. There is no need for a "cumbersome and costly apparatus" for short administrations of nitrous-oxide and oxygen; excellent results can be obtained with a simple one, such as described in Mortimer's "Anæsthesia and Analgesia."

It is difficult to understand the distinction between "stages" and "phases" and the table on page 7, nor have we observed "late coughing and retching of central origin" under ether, nor "breathing without respiring" (except as a result of obstruction).

It is not necessary or convenient to give nitrous-oxide to "near completion" when it is intended to follow on with ether, and the disadvantages of the "asphyxial factor" of the closed method can be more readily avoided than might be inferred from the author's description.

In emergency, laryngotomy should be done as described in Messrs. Mills and Humphreys's book, not deliberately. Cases are unlikely to occur in which more effectual methods than Laborde's cannot be employed, and it might well be omitted. In Sylvester's method "expiration" should be done first.

The section on Analgesia is generally good, as far as it goes, and we are glad to notice that stress is laid upon the dangers of sepsis. It may, however, be remarked that there is risk of much after-pain, and even of sloughing, if inflamed gums are frozen. The student will not find it helpful to be allowed to "use his own discretion" in selecting an analgesic drug. Surely it is time that cocaine should be discarded in dental work? We have criticised this little book at some length, for it is evidently popular, and the subject one of great importance.

VOCAL EXPRESSION. (*a*)

The lifeless manner in which many lectures and sermons are delivered by public speakers and teachers is a sufficient comment upon the scant attention paid to the subject of vocal expression generally. At least, such is the inevitable impression gained by enduring for a solid hour the monotonous delivery of many a well-known academic lecturer. The collection of papers, originally written for a musical journal by an acknowledged authority on voice-training, which form the subject matter of this little work contains much that is of interest to medical readers. The author has the strong conviction that the true development of vocal expression depends upon stimulating and accentuating the processes of thinking and feeling, and in so far as he recognises the value of psychic conditions as influencing bodily function he is quite right. Far too many orators and readers are slaves to mere mechanical rules of elocution, if, indeed, they ever succeed in escaping from the thraldom of dulness. The lecturer who "draws" the biggest audience—provided, of course, that his matter is good—is he who, out of the fulness of his heart, speaks in a conversational style, yet forcibly and convincingly, now appealing to the intellect and, then stirring the emotions of his hearers. All who have to speak in public will benefit from a perusal of this little handbook.

ALIMENTARY ENZYMES. (*a*)

In this book the passage of food through the alimentary tract is well described, special consideration being given to the action of the various enzymes. This is followed by descriptions of the composition of milk, cream, starch and barley water, with short chapters dealing with predigested foods and the feeding of infants. A second part of the book answers various questions that have been raised over the products of Messrs. Benger's Food Co., Ltd. The book is intended for the sole use of medical men, and it is thoroughly deserving of perusal by them. Its *raison d'être* is sound and honest, and the book will rank as another "Benger product" of merit. We may permit ourselves a comment to the effect that milk containing only 0.70 per cent. of ash (which is given as the average figure) will in the large majority of cases contain added water.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

Appleton, D., and Co. (London).
- Manual of Obstetrics. By John Osborn Polak, M.Sc., M.D. Illustrated. Pp. 468. Flexible leather. Price 12s. 6d.
- Minor Medicine. By W. Essex Wynter, M.D., F.R.C.S., etc. New second edition. Revised and enlarged. Pp. 275. Price 6s.

Bailliere, Tindall and Cox (London).
- Treatment by Hypnotism and Suggestion, or Psycho-Therapeutics. By C. Lloyd Tuckey, M.D., Aberd. Sixth edition, illustrated, revised and enlarged. Pp. 431. Price 10s. 6d.
- Radium: Its Physics and Therapeutics. By Dawson Turner, B.A., M.D., etc. etc. Second edition, revised and enlarged. Illustrated. Pp. 170. Price 5s.
- Diseases of Children: A Manual for Students and Practitioners. By John McCaw, M.D., R.U.I., L.R.C.P.Edin., etc. Illustrated. Pp. 524. Price 10s. 6d.

Bale, John, Sons and Danielsson, Ltd. (London).
- The Tuberculosis Year Book and Sanatoria Annual. Edited by T. N. Kelynack, M.D., Vol I., 1913 and 1914. Pp. 476. Price 7s. 6d.

Cambridge University Press (Cambridge).
- The Chemistry of the Leucocytozoon Syphilidis and of the Host's Protecting Cells. By J. E. R. McDonagh and R. L. M. Wallis.

Chapman and Hall (London)
- Handbook on Sanitation. By George M. Price, M.D. Third edition. Pp. 353. Price 6s 6d.

Churchill, J. and A. (London).
- A Short Practice of Midwifery for Nurses. By Henry Jellett, B.A., M.D., F.R.C.P.I. Fourth edition. Revised and illustrated. Pp. 508. Price 7s. 6d.
- A Course of Lectures on Medicine to Nurses. By Herbert E. Cuff, M.D., F.R.C.S. Sixth edition. Pp. 281. Price 3s. 6d.
- The Diseases of Children. By Sir James Frederic Goodhart, Bart., M.D. Tenth edition. Illustrated. Edited and Revised by G. F. Still, M.A., M.D. Pp. 959. Price 16s.
- The Ideals and Organisation of a Medical Society. By Jamieson B. Hurry, M.A., M.D. Pp. 51. Price 2s.

Clarendon Press, The (Oxford).
- Spencer's Philosophy of Science: The Herbert Spencer Lecture Delivered at the Museum, 7th Nov., 1913. Pp. 53. Price 2s.

Dornan, W. J. (Philadelphia).
- Medical and Surgical Reports of the Episcopal Hospital. Vol. I. Pp. 406.

Kelly, Charles H. (London).
- Youth. Edited By T. N. Kelynack, M.D. Pp. 152. Price 1s.

Lewis, H. K. (London).
- Lectures on Medical Electricity to Nurses. An illustrated manual by J. Delpratt Harris, M.D.Durh., M.R.C.S. Pp. 88. Price 2s. 6d.

Leadenhall Press (London).
- The Progress Book. An Illustrated Register of Development from Birth till Coming of Age and After. By J. J. Pilley, Ph.D. Revised and enlarged edition. Pp. 96.

J. B. Lippincott Co. (London).
- International Clinics. A Quarterly edited by H. W. Cattell, A.M., M.D., Philadelphia. Vol. III. Twenty-third series. 1913. Pp. 303.

Livingstone, E. and S. (Edinburgh).
- Materia Medica Notes. By James A. Whitla, L.R.C.P. and S., L.P.S.I. Pp. 157. Price 2s. 6d.

(*a*) "The Art of Vocal Expression." A popular handbook for speakers, singers, teachers and elocutionists. By the Rev. Chas. Gib. Pp. x., 91. London: William Reeves. 1913.

(*a*) Benger's Food, Limited, Manchester. Pp. 108, xviii., with 10 plates. 1913.

London University Press (London).
Mental Diseases. By R. H. Cole, M.D.Lond., M.R.C.P. Illustrated. Pp. 343. Price 10s. 6d.

Longmans, Green and Co. (London).
The Administrative Control of Smallpox: How to Prevent or Stop an Outbreak. By W. McC. Wanklyn, B.A.Cantab., M.R.C.S., L.R.C.P., D.P.H. Pp. 86. Price 3s. 6d.
A Manual of Surgical Treatment. By Sir W. Watson Cheyne, Bart., C.B. and F. F. Burghard, M.S.Lond. New edition, revised and rewritten, with the assistance of T. P. Legg, M.S.Lond., F.R.C.S. and Arthur Edmunds, M.S.Lond., F.R.C.S., in five vols. Vol. V Pp. 619. Price 21.

Macmillan and Co., Ltd. (London).
Feeding and Care of Baby. By F. Truby King, M.B., B.Sc. Pp. 162. Price 1s.

Ophthalmoscope Press, The (London).
Guide to the Microscopic Examination of the Eye. By Prof. R. Greeff with the co-operation of Prof. Stock and Prof. Wintersteiner. Translated from the third German edition. By Hugh Walker, M.A., M.B., C.M. Pp. 86. Price 7s. 6d.

Parke, Davis and Co. (London).
The Treatment of Rheumatic Infections. Pp. 134.

Putnam's, G. P., Sons (London).
Text-Book of Anatomy and Physiology for Nurses. By Amy E. Pope. Illustrated. Pp. 554. Price 6s.

Saunders, W. B., Company (London).
A Clinical Manual of Mental Diseases. By Francis X. Dercum, M.D. Pp. 425. Price 13s.
Illustrated Medical Dictionary. Edited by W. A. Newman Dorland, A.M., M.D. Seventh edition. Revised and enlarged. Pp. 1,107. Price 19s., with thumb index 21s.
The Pocket Medical Dictionary. Edited by W. A. Newman Dorland, A.M., M.D. Eighth edition. Revised and enlarged. Pages 677. Price 5s., with thumb index 6s.

Scientific Press, Ltd., The (London).
The Mutilated Hand and the Workmen's Compensation Act, 1906. By J. J. Scanlan, L.R.C.S. and P.Edin. Pp. 90. Price 2s. 6d.

Wright, John, and Sons, Ltd. (Bristol).
The Biology of Blood-cells. By O. C. Gruner, M.D.Lond. Pp. 392.

Williams and Norgate (London).
Nerves. By David Fraser Harris, M.D., C.M., B.Sc., etc., etc. Pp. 256. Price 1s.

LITERARY NOTES.

Among the many calendars sent us for the coming year is a most artistic reproduction in colours of the celebrated picture in the Louvre Gallery, Paris, of "Madame Le Brun and Child." The colouring is excellent and follows the original as closely as it is possible in colour-printing, the size being about 10 inches by seven. It is issued by Mellin's Food Co., Ltd., Peckham, London, S.E., who state that they are prepared to send a copy free of cost to the readers of this journal on receipt of threepence in stamps to cover the cost of postage.

* * *

Messrs. J. and A. Churchill announce the publication of the following new editions:—The 10th edition of "The Diseases of Children," by Sir James Frederic Goodhart, Bt., M.D., LL.D., F.R.C.P., and George Frederic Still, M.D., F.R.C.P.; the 4th edition of "A Short Practice of Midwifery for Nurses," by Henry Jellett, M.D.Dub., F.R.C.P.I., and the 6th edition of "Lectures on Medicine to Nurses," by Herbert E. Cuff, M.D., F.R.C.S.

* * *

Messrs. Bailliere, Tindall and Cox announce for publication Bulkley's "Diet and Hygiene in Diseases of the Skin," Findley's "Treatise of the Diseases of Women," McCaw's "Diseases of Children," Morison's "Sensory and Motor Disorders of the Heart," Tuckey's "Treatment by Hypnotism and Suggestion," 6th edition, Dawson Turner's "Radium," crown 8vo, 2nd edition. Curiously enough, this latter is the only medical book of English origin on the subject in the study of which Dr. Dawson Turner is so well known. Simon's "Clinical Infection and Immunity," 2nd edition (with coloured plates). The first edition of this latter book was disposed of in a few months, which undoubtedly proclaims it a work of great merit. It includes chapters on Serum Therapy, Vaccine Therapy, Chemotherapy and Serum Diagnosis.

* * *

The special Christmas number of *Truth* is crammed with good things. The satirical poems entitled "St. George and the Dragon" and "Forcible Feeding," respectively, illustrated by coloured plates and cartoons, will appeal to medical men by their topical humour, notably the one depicting "A Strike of Leeches," in which many eminent members of the profession appear in hirudinous disguise. Altogether this number is essentially one for the waiting-room table as well as for the fireside, and it should on no account be missed.

* * *

The "Deaf Handbook" (London P. S. King and Son) is an unpretentious little brochure which has been compiled by the National Bureau for promoting the general welfare of the deaf, and contains a variety of information of much value. It may be said to be a directory of the many and varied organisations dealing with that class from childhood to adult life. There is a short account of the Acts of Parliament affecting the deaf. Any medical man called in consultation regarding a deaf person would be well advised to look to this book for guidance.

* * *

The most interesting and to a certain extent the most instructive biographical notice we have read of Lord Lister is in the November issue of the *Sunday at Home*, entitled "The Religion of a Man of Science," by Allan Green. Lister did not parade his religion in the arena of controversy, says the writer. "That which suffused his personality was not to be trafficked with in argument, as though it were on a plane with his advocacy of the germ theory, or the use of carbolic acid in wounds. His was a spontaneous piety, like that of Lord Kelvin, who was to physics what Lister was to surgery. With both men their religion was something which shimmered behind the spoken and written word." No wonder that many of Lister's students in Edinburgh confessed that their contact with him was the best and purest influence of their lives.

LABORATORY REPORTS.

DIA-PARAFFIN.

This new preparation contains the well-known brand of malt extract and liquid paraffin, the latter being present to the extent of 28.72 per cent. according to our analysis. The preparation is a powder of a slightly crystalline appearance and a light buff colour. It has a pleasant slight odour of malt, and in taste it very closely resembles pure extract of malt. The taste is entirely devoid of any suggestion of oil. Dia-paraffin, when added to water, quickly forms a pale buff-coloured emulsion, which is quite stable. We administered the powder to two subjects who would be nauseated at the thought of taking oil. Both enjoyed it and experienced no stomachic unpleasantness. The usefulness of liquid paraffin is too well known to require emphasis here, but the effort generally needed to take it very greatly diminishes its scope. Hence we welcome this very admirable and entirely successful attempt to render the oil not only palatable, but actually attractive. We may add that the preparation is made for the Saccharin Corporation, Ltd., 10 Arthur Street, E.C., by the British Diamalt Company.

MEDICAL NEWS IN BRIEF.

The London School of Clinical Medicine.

The annual dinner in connection with the London School of Clinical Medicine (post-graduate) attached to the Seamen's Hospital, Greenwich, was held last week at Princes' Restaurant. Surgeon-General A. W. May, C.B., R.N. (Medical Director-General of the Navy), presided, and among those present were Sir Archibald Geikie (President of the Royal Society), Sir Thomas Barlow (President of the Royal College of Physicians), Sir Dyce Duckworth, Sir F. H. Champneys, Sir Havelock Charles, Admiral Sir J. Durnford, Sir James Chrichton-Browne, Sir J. Rose Bradford, Surgeon-General Sir W. L. Gubbins, Surgeon-General Sir James Porter, Commander H.

Bowring, R.N.R., Dr. Frank Heath, Sir Malcolm Morris, Sir William Bennett, Sir J. Mackenzie Davidson, and Mr. C. C. Choyce (the Dean).

The Chairman, in proposing the toast of "The School," said that at the present time they were on the wave, if not at the top of the wave, of an extraordinary advance in medical science. The "Dreadnought" medical college was giving its education and the riches of its accumulated learning to a body of men who were doing great service to the Navy and to the country at large, and it was in addition conferring benefit on the great Service to which they had all the honour to belong—the Navy.

Sir Archibald Geikie, in proposing "The Medical Profession," contrasted the position of medicine in the present day and 300 years ago. Nobody laughed at the doctor now. In all directions medical men had not only advanced their own profession, but they had to a very large extent gone out of their own sphere and advanced other branches of science.

Sir Thomas Barlow and Sir J. Crichton-Browne replied.

The Society of Apothecaries of London.

Mr. Martindale Ward (the Master) presided at a dinner of the Worshipful Society of Apothecaries last week at Apothecaries Hall, and among those present were Mr. Meredith Townsend and Mr. George Amsden (wardens), the presidents of the Medical Society of London, the Pharmaceutical Society, and the Society of Public Analysts, the Masters of the Grocers', the Girdlers', and the Carpenters' Companies, Mr. G. H. Makins, C.B., Sir Thomas Crosby, Sir George Savage, Surgeon-General Jeffcoat, and Dr. Norman Moore.

At a meeting of the Court before the dinner, Sir William H. Power, senior medical officer of the Local Government Board, was formally elected an honorary freeman of the society in recognition of his services to the State in regard to public health, and the Master presented the Society's gold medal to Mr. J. E. Harting in recognition of the assistance which he had given to Mr. W. Bramley Taylor (the late Master) in preparing a catalogue of the society's library.

Panel Doctor's Certificates.

In the City of London Court, last week, a case of importance to all insured persons and panel doctors was heard in which a woman, named Kipps, of Upper Grange Road, Old Kent Road, sued the Prudential Approved Society for Women, Holborn Bars, for 15s., being two weeks' benefit money at 7s. 6d. per week under the National Health Insurance Act.

Plaintiff's counsel said it was a test case. Plaintiff was ill after her confinement, and her panel doctor certified her incapacity. The medical certificate was signed by a rubber stamp, and the defendants had refused to pay the money in consequence. The society, he contended, had no business to adopt that attitude.

Defendants' counsel stated that as the rules provided for arbitration that Court had no jurisdiction. The Insurance Commissioners had issued a pamphlet requesting the doctors to sign their certificates in the ordinary way instead of using a rubber stamp, as it was found that in some cases housemaids had been affixing the rubber stamps to certificates without any authority from the doctors. He cited cases to show that the Court had no jurisdiction, and expressed the hope that the Court would not think the society's objection was capricious.

Judge Rentoul said he was sure it was not. There was no reflection on the society. The sole question was their legal rights. He must hold that the Court had jurisdiction, and that it was not ousted by the National Health Insurance Act. He would find for the plaintiff for the amount claimed, with costs on B scale, and he would give leave to appeal, as the dispute was certainly an important one.

Medical Man Sentenced.

On Monday last at the Manchester Assizes, before Mr. Justice Avory, James Vose, district superintendent of the Britannic Assurance Company (Limited), and Michael Joseph Ryan, medical practitioner, both of whom have been prominently associated with Church work in Bolton, were charged with obtaining various sums of money from the Britannic Assurance Company by making false declarations in regard to alleged death certificates, and with using the same as true, with intent to defraud the company.

Vose was for many years shareholders' auditor for the Bolton Wanderers' Football Club. He pleaded "Guilty," but Ryan, who denied the charges, alleged that he had given the certificates at Vose's instigation in the belief that there was nothing wrong. He said he was entirely innocent of fraud. He had known Vose for many years as a town councillor and churchwarden, and he regarded him as a man of integrity and honour. Vose told him the certificates were for the private use of the company and were not for registration, as the deaths had already been registered.

The Judge: Does it amount to this, that you were prepared to write down any falsehood at the dictation of any churchwarden—Ryan replied that he did not believe Vose would do any wrong or ask anyone else to do wrong.

In answer to further questions, Ryan said he would rather not give the name of the other medical man who, according to Vose, had signed certificates for him, but he was not a man the witness knew, though he had heard of him.

Ryan was convicted and sentenced to six months' hard labour, and Vose was sentenced to 10 months' hard labour.

Medical Man's Will—Big Bequests to Charity.

The late Professor Campbell, M.D., F.R.C.P.I., Hazelwod House, Dundrum, left personal estate valued at £21,314.

He left £10,000 to the Bishop of Meath towards the erection of a Catholic Cathedral in the diocese of Meath, intended to be erected at Mullingar; £5,000 to his brother-in-law, the Rev. David Morrissey, to be applied by him for charitable purposes in Ireland; £2,700 to be divided amongst 15 specified Irish charities; £100 and his household effects to Miss Elizabeth O'Brien, of Frankfort Avenue, Rathgar, and the residue of his estate he left for charitable purposes in Ireland.

University of Cambridge.

At a Congregation held on November 28th the following degree was conferred:—M.D.—H. E. S. Stiven (by proxy), Trinity.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

S. W. (Hendon).—The chemistry of senna leaves has been the subject of many recent investigations, notably by Tsehireh, Hiepe, and F. Tutiar, who have found in addition to rhein, salicylic acid, aloe-emodin, and kaempferol, a new glucoside of the latter substance in an alcoholic extract of the Tinnevelly leaves.

M.B.DURH. (Sussex).—The ordinary impetigo contagiosa is of streptococcal origin, and because this condition is frequently bullous in infants it is often mistaken for true pemphigus neonatorum. When the latter occurs in an epidemic form, as, for instance, in the practice of one particular midwife, it has been found by Drs. Wanklyn and Macrory, by bacteriological examination, to be streptococcal, and, therefore, to be a form of impetigo contagiosa.

MR. R. COLE (Hackney).—The child would be far better taken care of and educated in one of the institutions where lip-reading is made a speciality. It is often very difficult to distinguish between slight mental deficiency and mere backward development, but speech defects can be remedied to a great extent by patient and persevering tuition by a capable teacher.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, DECEMBER 3RD.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1 Wimpole Street, W.).—5 p.m.: Papers by Dr. Raymond Crawfurd: Martial and Medicine. Dr. J. D. Rolleston: Medicine in the Greek Anthology (Part II.). An exhibit will be made of Objects of Medical and Surgical Antiquarian Interest by Mr. C. J. S. Thompson from the Historical Medical Museum of Mr. Henry Wellcome.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8 p.m.: Cases and Specimens by Mr. J. Herbert Parsons. 8.30 p.m.: Papers by Mr. N. Bishop Harman: An Operation to Improve the Effect of an Artificial Eye. Mr. W. M. Beaumont: Iritis, Rheumatic and Toxæmic. Dr. Gordon Holmes and Mr. R. A. Greeves: Sarcoma of Choroid with Extensive Secondary Dessemination.

THURSDAY, DECEMBER 4TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF BALNEOLOGY AND CLIMATOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Dr. Guy Hinsdale: Mineral Springs, their Analyses and Newer Methods of Applications, etc., with a Note on Radio-activity of Mineral Waters. (At 7.15 p.m. the Members will dine together at the Welbeck Palace Hotel, Welbeck Street, W. The charge for the dinner is 4s. each, and Members may bring guests. Members who wish to dine are requested to send their names to Dr. J. Campbell McClure, 41 Welbeck Street, W.)

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY) (1 Wimpole Street, W.).—8 p.m.: Specimens by Mr. Alban Doran, Mr. J. D. Malcolm, Dr. G. G. Alderson, Dr. Wilberforce Smith, and Mr. Gordon Luker. Short Communications by Dr. H. R. Spencer, and Mr. Victor Bonney. Papers by Mr. Beckwith Whitehouse: The Relation of Syphilis to the Uterus. Dr. M. G. Stewart: Case of Fœtus Acardiacus Amorphus.

NORTH-EAST LONDON CLINICAL SOCIETY (Prince of Wales's Hospital, Tottenham, N.).—4.15 p.m.: Clinical Meeting.

CHILD STUDY SOCIETY, LONDON (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Mr. P. B. Ballard: Left-Handedness.

FRIDAY, DECEMBER 5TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—4 p.m.: Cases by the President (Dr. D. R. Paterson), Dr. W. Hill, Mr. Layton, Mr. A. J. Wright, Mr. G. Potts, Dr. E. A. Peters, and others.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (1 Wimpole Street, W.).—8.30 p.m.: Paper by Dr. A. Flemming: Review of Inquests concerning Deaths during Anæsthesia 1910-1913.

ROYAL SOCIETY OF MEDICINE (SECTION OF PATHOLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Laboratory Meeting at the Royal Army Medical College, Grosvenor Road, S.W.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8 p.m.: Cases will be shown. 8.30 p.m.: Paper: Mr. J. E. R. McDonagh: The Biology of Syphilis, illustrated by lantern slides, followed by discussion.

MONDAY, DECEMBER 8TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: (1) "A Case of Aneurysm of the Arch of the Aorta, treated by Colt's Method of Wiring. Death four months later" (with specimen). Sir Anthony Bowlby, C.M.G., F.R.C.S., and Mr. D'Arcy Power (2) "Circumcision. The Advantages of a Modified Operation," Mr. T. H. Kellock.

TUESDAY, DECEMBER 9TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF PSYCHIATRY) (Royal Bethlem Hospital, St. George's Fields, S.E.).—4.30 p.m.: Cases: Dr. W. H. Stoddart: (1) Hypopituitarism, (2) (?) Anxiety Neurosis, (3 and 4) Dementia Paranoides, (5) Congenital Neurasthenia, and other Cases.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY).—5.30 p.m.: Papers: Mr. Gilbert Kempe: Brachial Arteriovenous Aneurysm successfully treated by Vascular Suture. Mr. V. Zachary Cope: The Early Diagnosis and Treatment of Ruptured Intestine. Mr. H. Betham Robinson: Case of Endothelioma of the Breast.

Appointments.

BENNETT, J. G., M.B., Ch.B.Vict., Senior House Surgeon at the Manchester Royal Infirmary.

COPLANS, E., M.R.C.S., L.R.C.P.Lond., House Surgeon at Bolingbroke Hospital, Wandsworth Common, S.W.

DAVIES, H. MORRISTON, F.R.C.S.Eng., Honorary Surgeon to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

FURNESS, HAROLD S., M.D., B.S.Lond., House Surgeon at the Royal Free Hospital.

GRAHAM, W. P. G., M.B., M.R.C.S., an Inspector of Vivisection under the Cruelty to Animals Act.

HUTCHINSON, H. F., M.B., Ch.B.Vict., Junior House Surgeon at the Manchester Royal Infirmary.

Vacancies.

Free Eye Hospital, Southampton.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry. Applications to Edward C. Redman, Secretary.

Newcastle-upon-Tyne City Asylum, Gosforth, Newcastle-upon-Tyne.—Junior Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board, and laundry. Applications to the Medical Superintendent.

Rochdale Infirmary.—Senior House Surgeon. Salary £110 per annum, with board, residence, and laundry. Applications to T. Elvyn Kershaw, Secretary.

Nottingham General Dispensary.—Resident Surgeon. Salary £220 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

Royal Mineral Water Hospital, Bath.—Resident Medical Officer. Salary £120 per annum, with lodging, board, and washing. Applications to the Secretary.

Births.

HIGGIN.—On November 29th, at 4 Thurlestone Road, Newton Abbott, the wife of N. F. Higgin, M.B., of a son.

O'BRIEN.—On November 26th, at 100 Prince of Wales Mansions, Battersea Park, the wife of R. A. O'Brien, M.D., of a daughter.

RANKING.—On November 25th, at Hanover House, Tunbridge Wells, the wife of Dr. Robert Ranking, of a daughter.

WHITE.—On November 30th, at 35 Elms Road, Clapham, S.W., to Dr. and Mrs. Joseph White (*née* Marie Hind)—a son.

WIGHT.—On November 26th, at 9 Regency Square, Brighton, the wife of Edward Wight, B.A., M.R.C.S., L.R.C.P., of a son.

Marriages.

COWAN—EDGELL.—On November 27th, at St. Cuthbert's Church, Thetford, Geoffrey Cowan, B.A., M.D., fourth son of the late Alexander Oswald Cowan, M.D., and Mrs. Cowan, Fyrish, Evanton, Ross-shire, to Caroline Dorothea, youngest daughter of Mr. and Mrs. James Edgell, King's House, Thetford.

HORE—WATTS.—On November 27th, at St. John's Church, Surrey Road, Bournemouth, Major Harry St. G. Standish Hore, R.A.M.C., eldest surviving son of Lieutenant-Colonel Frederick Standish Hore, Dorset Regiment, to Mary Evadne, only daughter of the late Thomas Burgoyne Watts, Esq., of Bronwylfa, St. Asaph.

JOHNSTON—TYERS.—On November 24th, at Christ Church, Hampstead, J. E. L. Johnston, M.B., B.S.Lond., D.T.M. and H.Cantab., West African Medical Staff, son of Mr. J. C. Johnston, Madras Public Works (retired), to Gertrude Mabel, daughter of Mr. J. E. Tyers, Umaria, C. India.

Deaths.

ASHBY.—On November 12th, at Hampsthwaite, Leeds, John Ashby, M.R.C.S., in his 57th year.

CAMPBELL.—On November 27th, at Torquay, William Campbell, Surgeon, formerly of Wellington Square, Hastings.

GODSON.—On November 26th, at 5m Montagu Mansions, W., Clement Godson, M.D., V.D., of Sharsted Court, Westgate-on-Sea, and late of 82 Brook Street, W., Knight of Grace of the Order of St. John of Jerusalem.

HODGSON.—On November 22nd, suddenly, at Garfield House, Workington, Isaac Clark Hodgson, M.B., C.M.Glasg., aged 55.

PINHORN.—On November 25th, at 5 Cambridge Terrace, Dover, Susan Catherine Victoire, wife of Richard Pinhorn, M.R.C.S., L.R.C.P., London J.P.

SIMSON.—On November 28th, at Muttra, India, from acute nephritis, Kate Litton, beloved wife of Major Harold Simson, R.A.M.C., and beloved eldest daughter of Ernest and Kate Litton Clarke, of Chandos Street, Cavendish Square, aged 29.

WALCH.—On November 27th, at Brighton, Charles Nash Crosby Walch, M.B., of "The Croft," Rustington, sixth son of the late James H. B. Walch, of Hobart, Tasmania, aged 44 years.

WALFORD.—On November 28th, at 120 Finchley Road, N.W., Sarah Fannie, the beloved wife of Walter G. Walford, M.D.

WELCH.—On November 23rd, at 35 Heaton Road, Newcastle, from angina pectoris, Samuel Aaron Welch, M.R.C.S., aged 55.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, DECEMBER 10, 1913. NO. 24.

NOTES AND COMMENTS.

The National Medical Union. THE medical profession of the United Kingdom is passing through stirring times. At first sight it is difficult to gauge with any degree of accuracy the precise significance of the conference of delegates of non-panel practitioners, which on November 19th last called into formal being the National Medical Union. The basis of the matter, so far as can be gathered from the published reports, appears to be twofold, opposition first to the Insurance Acts, and, secondly, to the British Medical Association. It is clear, however, that no strong society could be founded on a merely negative policy, and, as a matter of fact, several of the speakers foreshadowed an active fighting organisation to protect the business interests of medical men. The conference experienced a good deal of difficulty in deciding the qualifications of membership. It was at first proposed to exclude any medical man directly or indirectly concerned in service under the Insurance Act. If carried, this proviso would have cut out not only the unpaid non-panel members of Insurance Committees, but also the large number of non-panel men who have signed Form 43 under the Act, whereby they were entitled to attend contracted-out insured persons The meeting showed a wide difference of opinion upon the point, but a compromise was at length arrived at in a vaguely worded resolution that members should not be "on the panel" and leaving autonomy in the matter to local organisations. In other words, the National Union starts upon an apparently contradictory constitution that indirectly admits panel men to a non-panel organisation. This matter, however, may well be amended on some future occasion when things have shaped themselves into more definite form. Meanwhile, the National Medical Union is an established fact, and we heartily wish it a long and prosperous career.

Non-Panel Men and Their Pledges. FOR the Union owes its origin to non-panel men, who, in not a few instances, have faced considerable monetary loss and even ruin rather than break their pledge to the British Medical Association. The fact that a number of medical men have never flinched from that position redounds to the honour of their profession. If by a strong and resolute union they can to any extent retrieve their misfortune or secure a future revision of the medical benefits administration of the Insurance Act they will be more than justified in their common action. As already hinted, there is another field open to them, namely, the formation of a rival body to the British Medical Association. There can be little doubt that the machinery of administration and the management of the Association leave much to be desired. At any rate, there is room for another great medical organisation to undertake representative functions in directions either neglected or not adequately discharged by the B.M.A. The recent London conference was attended by no less than 95 delegates representing some fifty non-panel associations, comprising some 1,000 members. It was stated that there are altogether about ten thousand non-panel medical men in the United Kingdom, but if we deduct men of the consultant class and those holding official posts, the residue of, so to speak, active non-panel practitioners will probably not bring the total to five thousand. One point about the new Union is that its strength appears to lie mainly in the provinces, and it is significant that some of the leading spirits come from Manchester. The future progress of the National Medical Union will be watched with close interest alike by friend and foe.

Two False Medical Certificates, and the Results. DURING the past week two criminal prosecutions of medical men have resulted in two convictions. In the one case a fine of £10 was imposed, and in the other the offender was sentenced to ten months' hard labour. The discrepancy between the sentences is hardly removed by a further consideration of the facts. In one case a London practitioner took a domestic servant to a nursing home, where she died a few days later as the result of abortion. The medical man granted a medical certificate attributing death to appendicitis, peritonitis, and cardiac failure. Under these circumstances it is clear that the medical man in question ran the risk of facing the criminal courts on a most serious charge. With the consent of the Public Prosecutor, however, who approved of the summary disposal of the case in the magistrate's court, he was there convicted of wilfully making a false certificate for which serious offence he was fined £10, with £10 costs. In the other case a Manchester medical man was convicted of granting false death certificates, which were used by three persons in connection with insurance frauds. Apparently there was no suggestion that he himself had profited by the transaction, and nothing to upset his statement that he had been the innocent tool of other persons. Under these circumstances six months appears to be a drastic sentence, especially when compared with the London case. Perhaps it is to be explained by the fact that in Manchester money was concerned, while in the metropolis human life was involved. A petition might well be presented to Mr. McKenna, the Home Secretary, calling attention to the discrepancy between the two sentences, and asking that the Public Prosecutor may give as careful and sympathetic attention to the Manchester as he did to the London case, with a view to the reduction of the penalty in the latter instance.

Scarlet Fever. IT is somewhat of a reproach that scarlet fever has not been diminished in its incidence upon the United Kingdom in spite of more than a generation of advanced public health administration. There are, of course, peculiar difficulties with regard to this disease, and medical science has yet a good deal to learn with regard to its causation, its methods of propagation, and its cure. Meanwhile, it is in our midst as one of our most deadly communicable diseases. There can be little doubt that one of the great practical advances with regard to prevention has been the provision of public infectious hospitals. To be of any real use, however, accommodation of that kind should be elastic enough to meet the demands of an epidemic. In London the advent of a serious outbreak of scarlet fever has shown the incapacity of the Metropolitan Asylums Board to cope with the demands of the situation. There has not been sufficient fever hospital accommodation for the scarlatina patients, who have in consequence had to remain in their own homes. The Asylums Board has excused itself on the ground of the impossibility of finding enough nurses to staff the hospitals. There is some reason to think, however, that the fault lies in another direction—namely, the way in which the Local Government Board has during the past few years permitted its hospitals to be diverted to purposes other than those for which they were provided. At the request of local authorities fever hospitals have been used for tuberculous cases, for classified pauper patients, and so on. The Asylums Board spends money like water, and the least it could do would be to see that London is provided against the pressure of a scarlet fever epidemic. After all, the weakness of the Local Government Board is at the root of all this makeshift and muddle.

Medical Martyrs. ANOTHER name has recently been added to the already long list of medical martyrs and heroes who have cheerfully laid down their lives in the very act of trying to save those of others. The melancholy news has been received of the death, on the 3rd inst., of Dr. Hubert Liston Willcox, of Warminster, from the results of a scratch received while performing an operation on November 5th last. Septic complications supervened, and, in spite of the unremitting care and attention of his colleagues, Dr. Willcox succumbed to the effects of the poison, at the early age of 36. Few people are aware of the enormous risks run by medical men in the ordinary course of their daily work. Exposed to the risk of contracting the most deadly diseases, either by direct infection or by accidental inoculation, the medical man steps fearlessly into some fever-haunted den, or a plague-stricken camp, blind to all personal danger, if so be he can carry out his ministry of healing. Long and glorious is the roll of honour of those who have nobly fallen in the fight against disease. Truly, their fame goeth out into all lands.

LEADING ARTICLES.

THE B.M.A. SUBSCRIPTION.

ON December the 5th the representatives' meeting of the British Medical Association decided to raise the annual subscription of members from twenty-five shillings to two guineas. At the present juncture of affairs the decision must be regarded as nothing less than momentous. The profession generally has been shaken to its foundations by the changed conditions of medical practice consequent on the introduction of the National Insurance Act. In the Association itself the situation has led to the formation of two opposing bodies—namely, the panel and the non-panel parties. For the next few years, indeed, the history of the Association will probably be concerned with the disputes between these two sections. At the same time, it is not altogether easy to see how any party can thrive indefinitely upon a negative policy such as that implied in the term "non-panel." At the meeting which inaugurated the National Medical Union of non-panel practitioners, the movement was well-nigh strangled at its birth by the attempt to exclude medical men on the panel. Matters were settled only by the adoption of a half-hearted compromise, in the shape of a resolution to the effect: "That the principal condition of membership of the new Federation shall be that applicants for membership shall not be on the panel, directly or indirectly, and that all local associations shall have power of autonomy." The only possible reading of this resolution, so far as can be seen on the surface, is that the first great fighting organisation of the non-panel men is provided with a side door for the admission of panel recruits through its local branches! A more Rabelaisian situation it would be difficult to imagine. Perhaps it is in the minds of the organisers of the National Medical Union to extend its sphere of action beyond that of the mere negation of this title. Mr. William Coates, the chairman of the inauguration meeting, laid down two main principles: First, that the British Medical Association was not a proper fighting force for the non-panel members; secondly, that the British Medical Association could not serve two masters. Reading between the lines it seems not unlikely that the National Medical Union will become a serious rival of the British Medical Association. Indeed, it is in view of such a possibility that its circumstances have been here adverted to at some length. In the face of this fresh rivalry it becomes more than ever important for the Association to retain its hold upon existing members. At such a time it seems little less than an astonishing ineptitude to raise the subscriptions of members from twenty-five shillings to two guineas. The result will certainly be to lead to a large number of resignations of membership, which would cripple the Association for many years to come. A more crucial point for the representatives to consider, in our opinion, is its present financial position. One of the representatives on the 5th of December, Dr. Montgomery Smith, handled that point with his accustomed force and clearness. His words amounted to a strong indictment of the financial state and administration of the Association. As recently stated in these columns, it is of little use resorting to various spendthrift resources—such as increasing subscriptions, raising advertisement rates, and increasing powers of borrowing, and the like. The straightforward course is to hold a searching expert investigation into the affairs of the Association, and, above all into the cost of the staff and the production of the *Journal*. The affairs of the Association have for many years been in the hands of a few persons whose management has led to the present crisis. The recent alterations in the constitution of the Association were intended to increase the control of members, but that hope has not been realised. Every change has been carefully engineered in the direction of government by Council. The want of confidence of members in the Council on the occasion of Mr. Smith Whitaker's acceptance of an insurance post was followed by adverse resolutions from nearly every branch in the United Kingdom. The Council, however, with a few honourable exceptions, sat tight in their places, and most of them are there to the present moment, although the policy of the Association has in the meantime made a *volte-face* from non-panel to panel. If the British Medical Association is to be saved, its *Journal*—a magnificent property—must be put under strict business management: its finances must be reduced to system; its control must be representative in reality as well as in name; it must be relieved of the curse of central control; its annual open meeting of members must be restored; its exercise of disciplinary powers carefully checked and guarded; and the burden of lay parasitism with which it is now permeated reduced to manageable proportions. Instead of increasing subscriptions, why not cut down expenses? The loss of the British Medical Association to the profession would, in our opinion, be irreparable. It looks, however, as if an early consummation of the kind were not beyond the range of practical politics unless its future course is inspired by wiser and saner collective action than that which has ended in the present crisis.

CURRENT TOPICS.

The Ptosic Hamlet.

Shakespeare's appeal is well nigh universal. The truism applies not only in its plain straightforward sense to those who read the plays and delight therein, but also to the mass of controversialists whose true delight is to convert molehills into mountains, which, pseudocyesically inflated with windy nothings, eventually produce a very mouse of literary accomplishment. We have the erudite enthusiasts who say that the plays were not written by Shakespeare but by another man who used his name; those who say that Hamlet was mad and those who say that he was only unconsciously assuming madness. Now let us look to Hamlet's physical condition. Hamlet is conventionally played as a lean, dark, saturnine man. Whence this convention arose it is hard to say, for the typical Dane is surely fair, and the only remarks of auto-diagnostic significance that Hamlet makes show him the very opposite of his usual conception. "Too, too solid flesh" encumbers him. He is "fat and scant of breath." He sways indecisively between profoundest gloom and hysteric gaiety. Read the play and consider how such a man would be treated to-day. The diagnosis is clear at last. A gouty diathesis and auto-intoxication with protein fermentation fills the bill and Hamlet's abdomen. We would promptly do a gastro-pexy and prescribe liquid paraffin. Of course, the real difficulty lies in the fact that Hamlet fits each new pathological theory of his condition as well as, if not better than, the last. Most of the thousand and one ills that flesh is heir to have been aptly fostered on the unhappy prince at one time or another. Still he survives and will probably go on as a diagnostic dummy, at any rate, till the question of his authorship is finally decided.

The Newcastle (Ireland) Hospital Again.

In last week's issue, speaking of the Royal National Hospital for Consumption at Newcastle, Co. Wicklow, we stated that, as far as was known, the Board had not receded from the position that the discussion of questions of treatment was one of its functions. On the day our paragraph appeared the Board made it clear that it still held this extraordinary view of its responsibilities. In the annual report, presented last Wednesday, the Board states its belief that the course taken, *i.e.*, the introduction of a particular method of treatment in opposition to the views of the consulting and visiting medical staff, was called for "both in the interests of the patients and of the public." The Chairman, in moving the adoption of the report, put matters more plainly: "Time has justified the course which we took in the beginning of the year. The results of treatment for the first nine months of the year showed marked improvement." The degree of judgment exhibited in such a statement as this is sufficient evidence of the ability of the Board to express an opinion on such a matter. Even the most optimistic of skilled observers would admit the necessity of a much longer period before pronouncing any opinion.

Ambulance Service for London.

The existing arrangements in London for the speedy removal of street accident cases to hospital and the rendering of efficient first aid have long been a subject for adverse comment. It is gratifying to learn, therefore, that a scheme for the establishment of a complete ambulance service was adopted by the Metropolitan Asylums Board last week. This scheme provides for the control of the organisation from the Ambulance Department of the head office of the Board, just as the present infectious ambulance service is now controlled, the two services being kept, of course, perfectly distinct. The seven existing stations in the metropolis will be supplemented by ten or twelve small additional depots exclusively for accident ambulances. Provided these are judiciously placed, almost every part of the metropolis will be within a mile or thereabouts of an ambulance station. Each of the new stations will, like the existing ambulance stations, be connected by direct private telephone line with the head office. It will be essential to maintain a continuous day and night service. Thus it is recommended that one accident ambulance should be provided for each station, with a small additional number in reserve for breakdowns, accidents, repairs, etc. With the aid of the proposed rapid ambulances, supplemented in certain circumstances by the wheeled and hand litters possessed by the police (about 400 in number), the St. John Ambulance Association, and the Bischoffsheim Association, it is believed that it will be impossible for any accident case in any part of London to remain for more than the few minutes necessary to make the call without first aid and the means of conveyance to the nearest hospital. It is also proposed to rely on existing telephone facilities and public call offices (which already number 2,770, of which number 15, and many railway-station call offices, are open day and night), supplemented, as may be found necessary, by additional means of calling—either street pillars or additional call-boxes. Only a few seconds would be occupied from the time of the call to the dispatch of the ambulance, and by arrangement with the police the passage of ambulances through the streets will be facilitated as is that of fire engines. Generally, no doubt, the call for the ambulance would come from the police, who will be thoroughly well informed from the outset of the arrangements; but no doubt it will not be long before the general public becomes acquainted with the system. The minimum necessary staff for each ambulance station will be two men in constant attendance, both capable motor drivers, with an intimate acquaintance with the streets in the area within which they would be operating, and both trained in first aid. This means, allowing for a weekly rest day, providing seven men per station, together with a few additional men for relief duty in cases of sickness, annual leave, etc. The capital expenditure is estimated at £18,680, to which must be added the cost of any sites purchased for new ambulance stations, and the annual expenditure at £17,860. The provision of the service is proposed under contract with the London County Council, the cost of that part of the scheme which is clearly separable from the Board's existing service to be defrayed out of the county rate. Thus equipped, the metropolis should, ere long, be second to none in respect of its ambulance service.

Railway Sanitation.

CLEANLINESS is comparative. Railway trains are now cleaner, no doubt, than they were twenty years ago, but they are still far from being perfect. The companies are providing more sanitary accommodation of some sort or another, but their standard is still far below what should be tolerated. Lavatories at stations are on the whole fair, and the more odoriferous examples are not so much the fault of the system in vogue as of its application. The glaring faults lie in the methods of disposing of sewage on trains. To scatter human excreta broadcast along a track should be unthinkable in an age such as ours. Railways run through thickly populated country, and expresses dash through our largest towns leaving behind them matter at the best offensive and at the worst dangerous to life. Water supplies to cities are carefully chosen. Mountain streams are tapped and their pure water carried for miles so that the city may be safe. At any moment these streams may be contaminated by a defæcating passenger, and this danger is the greater because it is wholly unsuspected. Some American companies make arrangements for the sewage to be removed from cars when they are on sidings for the night. There is no reason why some such system should not be universal. The present one, at any rate, is an intolerable anachronism. It is not many years since a serious outbreak of typhoid fever among railway navvies on an American line was proved to be due to contamination of the line from passing trains.

Wisbech and the Death of Dr Dimock.

THE tragic death of Dr. Dimock at Wisbech on the eve of a legal trial for slander is still fresh in the public mind. It was followed by local riots in which extreme resentment was shown against certain local medical practitioners under the belief that they had persecuted deceased. As a matter of fact, the local medical opposition against the Insurance Act was of a determined character, and the importation of Dr. Dimock as a panel doctor was followed by a general boycott. In the course of time deceased made certain accusations against Dr. Meacock, who had instituted criminal legal proceedings in his own defence. It is now found by the coroner's jury that Dr. Dimock committed suicide when "temporarily insane," and expert evidence showed the presence in the body of 2.67 grains of morphine and of 6.7 grains of veronal. If, as the coroner appeared to hint, the act of suicide was more or less tantamount to tacit admission of guilt on the part of deceased, the character of Dr. Meacock is to that extent vindicated. Under the circumstances, the actual truth can hardly be more directly disclosed—and most sensible persons will agree with the advice of the coroner that it would be best that all parties, including those who thought, and perhaps wrongly thought, there had been some injustice in the case, should bury the trouble in the grave of Dr. Dimock. It is much to be regretted that the local Insurance Committee have not adopted a like conciliatory policy in its appointment of a successor to deceased on the Wisbech panel.

Cocaine Snuff.

A FIRM of chemists in Birmingham has lately been fined for selling a poison in a bottle which was not properly labelled. The case revealed some curious circumstances. An inspector of the Pharmaceutical Society was supplied on request with 102 grains of snuff which on analysis was found to contain 2.34 grains of cocaine. The bottle was labelled with the defendants' name and also with the words, "The Snuff. G. Standfast, Esq. Book A, No. 1." We may say that the inspector's name was not G. Standfast. The defendants said that they treated the snuff as a prescription. Mr. Standfast obtained the prescription from an eminent physician and allowed his friends to ask for the snuff. The prosecution alleged that the snuff could be bought at nearly every licensed victualler's and tobacconist's, and offered to call evidence to show that the cocaine snuff habit had taken such a hold on a certain section of the population that men had been dismissed from their employment owing to the habit. The important facts of the case were not controverted, and the Stipendiary imposed a fine of 20s. and costs, but agreed to state a case on the points of law submitted by the defendants. Our idea, and, we believe, the public's idea, of a prescription is that it is a matter between patient and physician. But we should not be greatly surprised if the law held otherwise. We know the law.

The Hospital Journals.

EVERY association of men and women working together for some common cause, or united by ties of fellowship, requires its magazine, no matter whether it be a weekly journal or an annual report, to serve as a visible bond of union between past and present members. Medical students are no exception to the general rule, and the modern hospital gazette, it will be admitted, caters remarkably well for the class for whom it is intended. Many an aspirant to medico-literary fame has first tried his hand in the columns of his hospital journal, which, indeed, has sometimes to beg for contributions. The contents of an average number, vigorously censured by an ever-watchful editorial committee of the hospital staff, usually consist of a clinical lecture, a cartoon, a few smart editorial paragraphs, local news, and, last but not least, plenty of sporting notes. Now and then serious articles appear which might be considered worthy of a more serious publication and of a wider circle of readers, but it may be remembered that many of these appeal to that large number of old hospital men—long since qualified, and some of them retired—who still take a deep interest in the doings of their Alma Mater. We understand from the *Guy's Hospital Gazette* that a scheme is in progress whereby a certain degree of co-operation of the various hospital journals in London may be obtained in order to discuss in their respective columns matters of current and vital interest to medical students. Among the subjects with which it is proposed to deal in this concerted manner are the proposed changes in the University of London and the question of anatomical terminology. We might suggest, in addition to these, such topics as the art of prescribing, the methods of dealing with different types of patients with a view to private practice, the recognition of minor ailments, the elementary principles of hospital administration—especially for senior students and duly-qualified men. No doubt other subjects will suggest themselves for discussion collectively in all the hospital journals, so that the current opinion of medical students, and practitioners also, can be more effectively dealt with than at present is the case.

The Deficiency Diseases.

Much interest has arisen of late years in regard to a group of disorders which are believed to arise not from any extraneous cause, but from some inherent deficiency in the diet which makes itself felt in the tissues of the body. The question was dealt with at a recent meeting of the Therapeutical and Pharmacological Section of the Royal Society of Medicine in a discussion opened by Professor F. G. Hopkins, F.R.S., who showed, as a result of his own experiments, that the removal of substances, minute in amount and of unknown nature, is able to produce a very marked effect upon the physiological properties of a dietary. He has proved that young rats absolutely cease to grow if fed upon a diet consisting of purified materials, such as after thorough extraction with alcohol. The results of the deficiency of iron, lime, fat, or vegetable acids in a diet are familiar to all, and the so-called zeistic theory of the production of pellagra is based upon the deficiency in maize of the aromatic amino-acid tryptophane. These scientific "vitamines," the absence of which is believed to be the cause of scurvy, beri-beri, and, perhaps, of pellagra also, may, as Professor Casimer Funk has pointed out, be naturally lacking in certain foods, or else they may be artificially removed by the process of milling, high temperatures, or extraction during cooking, when the decoction is rejected. The results of feeding human beings on polished and unpolished rice with regard to the incidence of beri-beri seem to indicate pretty clearly that there is more than a casual connection between the hypothetical vitamine in rice and the development of the disease. Other observers have drawn attention to the relationship of the consumption of other cereals to deficiency diseases. No doubt the science of biochemistry will have something more to say upon the matter in the near future.

PERSONAL.

Dr. P. W. Saunders, M.B., M.R.C.P.Lond., has been appointed Assistant Physician to the Royal Free Hospital.

Dr. Stanley Wyard, M.D., B.S.Lond., M.R.C.P. Lond., has been appointed Pathologist to the Bolingbroke Hospital, S.W.

Dr. C. F. Hadfield has been elected Chairman of the recently-formed City and North-East London Non-panel Practitioners' Association.

Mr. Harold Clifford, M.B.Lond., F.R.C.S.Edin., M.R.C.S.Eng., L.R.C.P.Lond., has been appointed Honorary Gynæcologist to the Salford Royal Hospital.

Dr. Edward Austin Fox, M.D., of New Brighton, formerly of Warrington, Consulting Surgeon and a Life Governor of the Warrington Infirmary, left net personalty £28,908.

Professor John Campbell, M.D., of Hazelwood House, Dundrum, Co. Dublin, who died on September 11th, aged 78, left personal estate in the United Kingdom valued at £21,314, of which £5,036 is in England.

Surg.-General Sir Launcelot Gubbins will read a paper on "Jean Dominique, First Baron Larrey; His Life and Work," before the United Services Medical Society, at the Royal Army Medical College, Grosvenor Road, S.W., on Thursday, December 11th, at 5 p.m.

A plaster cast of the late John Hunter from the mask in the Royal College of Surgeons of England, presented to the trustees of the National Portrait Gallery last October by Messrs. D. Brucciani and Co., has now been placed on exhibition in the Sculpture Gallery.

Dr. Preston King, Mayor of Bath, was presented last week by East Anglians resident in Bath with a silver rose-bowl. It was pointed out that one of Dr. Preston King's ancestors had been chairman of Norwich Council, and that his portrait in his robes of office was painted by Opie.

Mr. James Rutherford Morison, M.A., M.D., F.R.C.S., has been appointed Consulting Surgeon to the Royal Victoria Infirmary, Newcastle-upon-Tyne, in recognition of his distinguished services to the Institution, and an illuminated address was presented to him on behalf of the Governors at their last quarterly Court.

Dr. D. G. Thomson, Honorary Secretary of the Mid-Norfolk Division of the East Anglian Branch of the British Medical Association, and Honorary Secretary of the Local Medical Committee for Norfolk, was the recipient the other day of a handsome presentation of plate from the medical practitioners of Norfolk in recognition of his services rendered to them.

FRENCH CLINICAL LECTURE

ON

MENINGEAL HÆMORRHAGE IN CHILDHOOD.

By PROFESSOR HUTINEL, M.D.,

Physician to the Hopital des Enfants Malades, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

DURING a period of three weeks, by virtue of those curious "runs" which occur in medical practice, we have had in our wards three examples of a rather rare affection, and I cannot do better than make it the subject of my lecture.

The first case is that of a little girl, æt. 3½, who weighed 7½ lbs. at birth, and was brought up by a nurse in the country. The child's mother had had five pregnancies, all of which went on to term, and she had lost two children, one of meningitis at the age of 15 months. This particular child had had convulsions, and at 12 months of age she contracted measles since which she has been subject to bronchitis. For the last three weeks this little girl has lost her appetite and has been suffering from constipation; then, too she has had two or three well-marked epileptiform convulsions. Her condition on admission to hospital was as follows:—

She was very emaciated and drowsy and lay on her back. There was no temperature. She presented numerous peri-orbital and auricular ecchymoses. Others were seen on the trunk, on the outer aspect of the left thigh, and on both lower limbs. The belly was retracted, and she displayed the *tache cerebrale*, or vaso-motor white line. The patellar reflex was more marked on the left than on the right. Babinski's sign was noted on one side, and, on the other, flexion of the toes. Respiration was irregular, there was stiffness of the neck, but no inequality of the pupils nor strabismus. Lumbar puncture gave issue to a blood-stained fluid under pressure.

There was slight improvement four days after this examination, that is to say, on December 6th. On the 16th, she had an attack of vomiting, and the little patient fell into a state of torpor, as if she were going to have a relapse. The ecchymoses, which had been clearing up, came out afresh. We again performed lumbar puncture, prescribed aperients and a vegetarian diet, whereupon improvement once more set in, and has since continued in such wise that she may now be regarded as on the road to recovery.

The second case also concerned a little girl, æt. 2, born before term (eight months), after a laborious confinement, and she is reported to have weighed only 3½ lbs. at birth. No history of syphilis in either father or mother, who were both in excellent health. They brought her to the hospital on account of stiffness of the legs of three days' standing.

On waking up on the morning of November 24th she complained of feeling sick. In the course of the day we noticed that she dragged the right leg. On November 25th, both legs were affected. The reflexes were exaggerated, there was well-marked stiffness of the neck, and a positive "fan sign." She had also slight facial paralysis on the right side, inequality of the pupils and a rapid pulse. Lumbar puncture gave issue to a clear fluid, *not* under pressure. It contained albumen, red corpuscles and lymphocytes. We tried the intra-dermo-tuberculin test which yielded a positive result.

We were struck in this case by the very pronounced hyperæsthesia, so marked as to cause her to cry out on the lightest touch. This sign, it is true, does not militate in favour of tuberculous meningitis, but rather of poliomyelitis; nevertheless, as there was no change in electric contractility, the latter diagnosis does not commend itself.

In this case, again, we are in presence of meningeal hæmorrhage. The stiffness of the neck and the paralysis of the limbs persist, and the cerebrospinal fluid still contains red blood corpuscles. Wassermann test negative. It may be that the hæmorrhage is due to tuberculosis, but it can safely be asserted that it is not attributable to tuberculous meningitis.

In the third case, the patient was a child, æt. 12, previously very intelligent, who had suffered from time to time from headache. When out walking one day he suddenly felt unwell, got into an omnibus to return home, and became comatose. In carrying him to his bedroom it was remarked that the limbs were stiff. A doctor who was called in advised removal to hospital.

On examination we noticed slight deviation of the head and eyes, with unequal pupils and paralysis, especially pronounced on the right. We diagnosed meningeal hæmorrhage, which was confirmed by the results of lumbar puncture. After four or five days the little fellow gradually recovered from his state of torpor and got up, but he dragged his leg and had well-marked incoordination of movement and nystagmus. He left hospital a few weeks later and came back for examination every six months. To begin with, his gait was irregular and rather "inebrious," and the reflexes on the right side were exaggerated. On December 12th, 1912, his attitude was normal; in fact, the child may be considered to have recovered.

The more we study this somewhat uncommon affection, the more numerous do cases of the kind seem to be and the researches of which it has been the object during the last few years enable us at present to recognise its existence with greater ease. What we must bear in mind is that meningeal hæmorrhage in infancy is far from rare. There may be hæmorrhage into the pia mater, either on the convexity of the encephalon or behind, cerebellar, extending right into the spinal canal. These hæmorrhages are often met with in lying-in hospitals, and are attributed to traumatism, to the compression of the neck by a twisted cord, or some interference with the venous circulation. I can recall the case of an infant, born in a state of asphyxia, who had convulsions. Under bromide these disappeared, but we are nevertheless justified in apprehending latent encephalitis.

There sometimes seems to be a sort of predisposition, but as a general rule the victims are prematurely born infants or debile twins. An infant, æt. 1 month, after a chill, had convulsions, lumbar puncture was performed, and the existence of meningeal hæmorrhage confirmed. The infant recovered, but a year later the child was notably behindhand.

We are apt to get symptoms of coma in these newly-born infants with petechiæ, subicterus and black urine. These are cases of septicæmia (coli bacillus or streptococci) which end fatally. We may get thrombus of the sinuses or other veins and "red softening" in somewhat older children.

Meningeal hæmorrhage may occur after a fall or shock of some kind, but the form which presents most interest to practitioners is that met with in connection with hæmorrhagic states such as purpura. In these cases we must make a very guarded prognosis, because they may end fatally, as in the case mentioned above. We also meet with meningeal hæmorrhage in connection with the grave infectious diseases, small-pox, measles, typhoid, septicæmic states, malignant scarlet fever, grave icterus and leucæmia.

It may be due to simple disturbance of the circulation. I remember a little boy, æt. 4, who, in the course of an attack of whooping cough, fell into a state of coma after an attack of suffocation. There was stiffness of the neck and contraction of the limbs. Death proved to be due to meningeal hæmorrhage. The same thing has happened in the course of epileptic attacks.

Meningeal hæmorrhage is most frequently caused by irritation of the meninges due to bacillary meningitis or to syphilitic pachymeningitis. We sometimes meet with it in the course of an attack of cerebro-spinal meningitis. Marfan and others have called attention to the occurrence of fibrinous hæmorrhagic meningitis in connection with septicæmia, accompanied by meningeal hæmorrhage *en nappe*.

To sum up, meningeal hæmorrhage is met with in newly-born infants, in infants who have become infected, and in connection with hæmorrhagic states. It may also follow strain or effort in presence of meningeal irritation, and is almost always of venous origin in infants.

In most cases the symptomatology is reduced to somnolence and a tendency to coma. Conjugate deviation of the eyes and head is less frequent than in cerebral hæmorrhage. Epileptiform convulsions are common, and are usually of the Jacksonian type. Contracture is usually present, and Kernig's sign is pretty constant. In older children we may meet with hemiplegia or monoplegia. Sometimes there is amaurosis or incontinence of urine. The reflexes are exaggerated, but should there be hypertension of the cerebro-spinal fluid they may be abolished. Vomiting is common, and respiration is often dissociated, as in tuberculous meningitis. The temperature may rise and reach 104° F., or more when death is imminent.

Then, too, there are varied latent unrecognisable forms Two types have been described in the newly-born—the blue and the white. The latter form is the most serious, and the victim succumbs with extensive effusions of blood. Lumbar puncture gives issue to a more or less manifestly blood-stained fluid.

With regard to prognosis, this is not quite as grave as it used to be, and recovery is not uncommon, though the forecast must be guarded in respect of the child's future. Epilepsy is very apt to supervene later on in life.

When we have arrived at the diagnosis of meningeal hæmorrhage, we must see that the patient is kept very quiet, with ice to the head; the limbs are wrapped in wadding, the bowels are cleared with enemata and aperients, and recourse should be had to lumbar puncture except in hæmorrhagic subjects. Bromide is usually of benefit in these cases by diminishing cerebral congestion.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Dr. Henri Claude, Professeur Agrege in the Faculte de Medecine of Paris. Subject: "Defensive Reflexes: Their Semeiological and Prognostic Value."*

ORIGINAL PAPERS.

ISOLATION AND QUARANTINE IN THE MORE COMMON INFECTIOUS DISEASES. (a)

By CLAUDE B. KER, M.D.EDIN., F.R.C.P.,
Medical Superintendent City Hospital, Edinburgh, Lecturer on Infectious Diseases, University of Edinburgh.

THE author remarked that the regulations for the isolation and quarantine of infectious diseases were to some extent traditional. Views on the subject were changing, and a reconsideration of the rules seemed necessary. Public authorities and schools were tied by the opinions generally held, and before they could change their regulations they must have the assurance that professional opinion supported them. In some cases much time and money would be saved by relaxing the rules; in others, the question was more an academic one, as the patients' disability lasted longer than their infectivity.

In scarlet fever, the practice in Germany, America, France, and Britain was to isolate for six weeks. This was probably based on the fact that in the average case desquamation was complete in that time. But was there any reason to believe that desquamation was ever infectious? Scarlatina was infectious before desquamation began, and might be infectious after it had ceased. The desquamated scales might share whatever danger was to be attributed to fomites. If the skin were disinfected it was probably as harmless as the patient's clothing after disinfection. Drs. Lauder and Millard had cut down their minimum detention periods to four weeks, disregarding desquamation, and there had been no increase of cases of infection. Their average detention period for hospital patients was 36 days. The average period in Edinburgh was 45 days. This meant a large outlay in money to the ratepayer. Scarlet fever was to be regarded as a moderately infectious disease for two weeks after its onset. Infection usually ceased in the second fortnight; after the second fortnight very few cases remained infectious. Could the detention period not be reduced? What would the attitude of the doctor be if a return case followed the sending out of a patient still desquamating?

There might be healthy carriers of scarlet fever just as there were in diphtheria.

These could not easily be checked. If a scarlet case had a nasal discharge or other possible source of infection, he would advocate detention even for 20 weeks; but if in the average case a five weeks' minimum detention was sufficient, why should the ratepayer be made to pay for six? Long detention in hospital did not diminish infectivity.

(a) Paper read before the Edinburgh Medico-Chirurgical Society, December 3rd, 1913. See page 646.

For the quarantine period in scarlet fever he accepted Goodall's statement—namely, six days. He had never known an incubation period longer. Why not cut down the ten days for schools to seven?

In diphtheria the causal organism was known. He would advocate keeping patients till on two successive occasions no bacilli were found. A quarantine period was useless. As soon as contacts gave negative results they might be regarded as non-infectious. To keep contact children away from school for ten days and send them back without throat examination was useless.

In measles infection did not outlast the catarrh. Measles cases with a rash could hardly be turned out of hospital, but in private houses a great relaxation of present practice might easily be allowed.

Dr. Ker said he was not to be taken as opposing the hospital treatment of measles. He was strongly in favour of it, but not on the ground of infection. He thought more lives were saved in Edinburgh by the hospital treatment of cases of measles and whooping-cough than by any other means. His quarantine period for measles was fifteen days. Once in seventeen years he had seen an incubation period of seventeen days, but he kept to the fifteen-day period. He acted in accordance with the rule rather than with the exception.

Nine or ten days elapsed from the moment of infection to the first sign of the disease, or thirteen days till the appearance of the rash. Might it not be possible to allow contacts to attend school during at least part of the incubation period? In some schools attendance was allowed for eight days. The contact was kept away from the ninth to the fourteenth day, and only five days were lost. The practical difficulty arose in ascertaining whether infection might have occurred at a first or subsequent exposure—a difficulty which was the greater since early symptoms might be overlooked.

In rubella the infection existed before the rash and ceased after it, and it was doubtful if there were any infection during the period of the rash. An ample detention period would be ten days. The incubation period was from the twelfth to the twentieth day. He had never known it less than thirteen. The quarantine period was thus twenty-one days.

In whooping-cough the patient ceased to be infective when the whoop developed. If a case developed whooping-cough in a ward, every susceptible child took it. It was infective in the catarrhal stage. But when a child had been admitted after that stage no other case developed. This view received confirmation if one accepted the bacillus of Bordet and Gengou as the cause of whooping-cough. The bacillus could readily be found during the catarrhal stage, but not afterwards. Rigid isolation in a private house was not necessary after a week or ten days.

Chicken-pox was infective till the crusts separated. Incubation was always over twelve days. Contacts might go to school for ten days after exposure. His quarantine period was twenty-one days.

The usual detention period in mumps was put at three weeks. This might be too short, but was usually far too long.

He would put the detention period at one week from the subsidence of the swelling. Alternatively he might suggest a fortnight from the beginning. This would cover the cases of orchitis and pancreatitis. He had never known these occur after the ninth day. He would exclude contacts from school from the thirteenth to the twenty-sixth day.

He would like to put the following questions forward for discussion:—

1. Might not the minimum detention period for scarlatina be cut down from six weeks to five?
2. Was there any proof that measles was infectious after the catarrhal stage, or that whooping-cough was infectious after the whoop had begun?
3. Might not the early part of the incubation period in rubella, chicken-pox, measles, and mumps be utilised for educational purposes?

NOTE.—A brief report of the discussion will be found on page 646.

THE TREATMENT OF SCOLIOSIS. (a)

By PAUL B. ROTH, M.B., CH.B.ABERD., F.R.C.S.ENG.,

Surgeon, Kensington and Fulham General Hospital; Senior Orthopædic Clinical Assistant, London Hospital.

I PROPOSE to confine my remarks to the examination and treatment of a patient with scoliosis.

The Spine.—The patient is stripped to expose the whole of the iliac crests: the clothes are prevented from slipping down further by a large safety-pin. The hair is coiled up out of the way.

(*a*) From Behind.—After a general view, noting the "habitual position," the patient, standing with feet together and knees straight, completely flexes the spine, the head and arms hanging down limply. If the surgeon then observes the "horizon" of the back from different levels and from in front as well as from behind, he will at once notice any structural deformity: the ribs, or the erector spinæ in the lumbar region, will project more on one side than on the other. If there is no projection on one side more than on the other the case is one of "postural scoliosis"; if there is projection the case is one of "structural scoliosis," and the amount of rotation is at once recorded by using a malleable tin tape (1). This is moulded transversely across the ribs posteriorly from the lower angle of one scapula to the lower angle of the other, and also across the loins midway between the twelfth rib and the iliac crests, with the spine still fully flexed. A tracing of the moulded tape at each level is made on paper; this is cut out with scissors, pasted into the case-book, and a permanent record of the rotation thus obtained. If the patient is seen years later, one can at once discover by taking a similar moulding whether the deformity has diminished or increased.

It is difficult to understand why this extremely simple method has not been generally utilised. Latterly Dr. Abbott, of Portland, Maine, has been using a photograph of the "horizon" of the back as a record of the amount of deformity, but a careful inspection of his paper (2) shows us how misleading these photographs may be. It is so difficult to get the patients flexed to the same degree both in the photograph taken before treatment and in that taken after, and if they are not flexed to the same degree the photographs are valueless. Anyone accustomed to examining cases of scoliosis by observing the "horizon" of the back at different levels knows what an enormous change can be produced by the patient flexing her spine a little more, or extending it a little more. If the deformity is low down, it can be entirely made to disappear from the "horizon" by the patient not flexing her spine so much: if she be then asked to slowly fully flex her spine again, the deformity gradually comes into view. In many of Dr. Abbott's photographs, which are intended to show that he has got rid of a hump, the position in which the second photograph has been taken is quite enough to hide it, without any treatment whatsoever. This chance of error is entirely absent in working with the tin tape, for the tracings to be compared are always made at the same level. The deformity should not be recorded

---

(*a*) Read before the Section of Orthopædics, International Congress of Medicine, London, August, 1913.

by observing how far the spinous processes have deviated from the middle line, as is sometimes attempted by drawings or photographs, for, besides being exceedingly difficult to measure accurately, the amount of deviation is not a measure of the amount of scoliosis. Often a severe amount of deformity is present, and yet the spinous processes are still practically in a straight line. The following passage from Mr. Tubby's "Deformities" (3) will serve to emphasise this point:—"In fact, we must judge of the presence or absence of curvature, not from the lines of the spines at all, but by rotation signs—*e.g.*, rib prominence backward on one side. And we may go further still, and add that if the rotation signs indicate, say, curvature to the right, whilst the lines of the spines suggest curvature to the left, we must accept the evidence of rotation, and disregard the line of the spines."

(*b*) From the Side.—Observe the state of the antero-posterior curves. In scoliosis the normal antero-posterior curves are exaggerated or, less commonly, diminished.

The commoner condition is an exaggeration of the dorsal curve: the patient stoops and pokes the head forward. To bring back the centre of gravity to the middle of the body, compensatory exaggerated lordosis develops in the lumbar region; this makes the abdomen prominent. The less common condition is where the normal curves appear to be flattened out. Accompanying both these types is a drooping downwards and forwards of the scapulæ.

(*c*) From the Front.—Observe the degree of development of the chest, and look for a prominence of the ribs on one side or the other. Often the chest is what one calls badly developed, being flat or even hollowed.

The Legs.—Difference in the length of the legs is best examined for by placing the thumbs on the anterior superior spinous processes, with the patient standing. If both thumbs appear to the eye to be on the same level, the legs are of equal length. If they appear to be at different levels, the legs must be measured with the patient lying down in the ordinary manner. Slight differences in the length of the legs are of little if any importance.

Prognosis.—Having observed the "habitual position" in which the patient stands, it is now necessary to ascertain the "best possible position" in which she can be placed by the surgeon. This is not found by hanging her from a trapeze, but by making her stand as erect as possible, with head straight, shoulders level and drawn back, chest out, abdomen in, and arms stretched down. (If one leg be short a suitable block should be placed beneath the foot.) She may only be able to maintain this position unaided for a few seconds, but if she can maintain it at all, then the parents may be assured that the patient can be trained to assume this position naturally, so that the "best possible position" will become the "habitual" one.

When a case with even severe structural deformity is put in the "best possible position" often much of the deformity is masked, and this is what the surgeon desires. For, once there is structural deformity of the ribs, it cannot be got rid of. This must be carefully explained to the patient's parents. If photographs are taken of the patient, they should be taken on the first day of examination, and one set should be taken when the patient is in the "habitual position," and another set when the patient is in the "best possible position." In the past a common practice has been to take the first set all right, but omit taking the second set until after a course of treatment. The great improvement demonstrable in this second set is then attributed to the treatment, whereas just as favourable a set of photographs could have been obtained before ever the treatment was begun. We are even not quite free of this method yet: I feel sure Dr. Abbott will not mind my again referring to his paper (2) (Case 6). In the first photograph (Fig. 1) the patient, afflicted with severe infantile paralysis of one limb, is shown in his "habitual position"; in the second photograph (Fig 3) he is shown after treatment, much improved, *but with a block beneath the short leg.* In order to judge of the effect of treatment, the block should have been placed beneath the short leg when the first photograph was taken.

The Clothes.—After examining the patient, she is told to dress, and is placed in the "best possible position" as each garment is put on, while the surgeon observes if it is sufficiently loose. In 90 per cent. of cases the clothes across the chest are two or more inches too tight; and very little improvement can be obtained in such cases if the clothes are not attended to first of all.

As regards corsets, the patient should continue to wear those she is accustomed to, provided they can be made loose enough. (*a*) If the corsets are held in position by straps over the shoulders, as in young girls, the stockings should be kept up by garters, and not by suspenders attached to the corset, for the continual pull of these is quite enough to make a delicate child stoop. Boys should wear a belt, or Y-shaped braces which meet together behind high up, and so leave the scapulæ free.

TREATMENT.

This will depend on the views of the surgeon. The different methods at his disposal are (1) so-called "gradual correction" in a support or corset; (2) so-called "rapid correction" in a plaster jacket; (3) gymnastics; (4) combinations of (1) and (2) with each other or with (3).

In spite of bold assertions such as that scoliosis "yields to treatment far more readily than either bow-legs or club-feet," or that "the parts entering into the deformity are actually turned back into their normal positions," I am more than ever sure that the structural deformity of scoliosis—*e.g.*, a rib prominence, once present, can never be got rid of. Holding this opinion, the only method which seems to me the rational one is the gymnastic, and that particular form of it which is known as the method "by Posture and Exercise" (4) is the one which in private I solely practice. I believe that violent methods, and methods which have caused the death of patients must be considered violent, will temporarily cause a rib prominence to disappear, will even temporarily produce a rib prominence, but I do not believe that these changes are permanent or that the vertebræ themselves even become changed at all. The treatment I adopt, which was introduced by my grandfather, Dr. M. Roth, and elaborated by my father, Mr. Bernard Roth, is conducted on the following principles:—

Attention to Dress.—If the clothes are not loose enough to allow of patients assuming the "best possible position" the efforts of the surgeon are largely wasted. It often happens that patients are exercised undressed—a quite unnecessary proceeding—and are then allowed to dress again in their badly-fitting clothes, which at once cause them to assume the "habitual position," the very position which the surgeon wishes to avoid. It is for this reason that no improvement in carriage is observed in patients after wearing spinal jackets, for they are fitted with the patient hanging from a trapeze or lying twisted on a sling, neither of which methods make the patient assume the "best possible position" at all, and any effort on the part of the patient to assume a better position is prevented by the jacket. Often when such a patient is placed in the "best possible position" the sides of the jacket or support she has been wearing will not meet in front for several inches. Yet this is the appliance which it is confidently hoped will straighten up the patient.

Daily Systematic Training, for from one to three months, of the spinal and other muscles, including the development of the thorax.—As I hope to give some of you a demonstration of the necessary exercises, I will only allude shortly to them here.

For a month the patient is made to do symmetrical exercises, in the "best possible position," regardless of the particular variety of curve present. After a month she is examined undressed again, and a position of the arms decided upon which makes the spine look straightest. This position may be arms up holding a stick; elbows grasped above head; right arm up left out; left arm up right out; right arm up left grasping right wrist; or left arm up right grasping left wrist.

(*a*) A good make of corset is that known as "Spirella."

Thereafter many of the exercises are done in that position. They are all done with the clothes on. At first they are easy, but gradually they are made more and more difficult, as the strength of the patient increases. They consist largely of concentric and eccentric movements, patient resisting or surgeon resisting, and of simpler ones carried out under the supervision of assistants. In each case the surgeon has to feel his way and gradually increase their severity. The exercises are done daily; only thus can the effect of habit be overcome and the weak muscles quickly made strong. The patients are not treated separately, but several together in the exercise-room at the same time. While one is doing an exercise with the surgeon another does one with an assistant, while a third and fourth are resting on suitable couches, waiting their turn. Working on this plan with two assistants one can efficiently treat twenty patients in an hour and a quarter. An advantage in treating patients together, apart from the saving of time, is that each profits from another's example, the intelligent ones unconsciously assisting the backward.

Daily Re-education of the Patient's Muscular Sense as to an Erect or Improved Position.—A great many crooked patients, when told to stand up straight, place themselves in a worse position than before. Their muscular sense has become so perverted that the vicious posture appears to them quite natural, while the improved position in which they are put by the surgeon appears to them, through their perverted muscular sense, to be totally incorrect. This re-education is carried out coincidentally with the exercises; while the patient is performing an exercise she assumes the "best possible position," and in the intervals between the exercises she is encouraged to maintain it. After a time this "best possible position" becomes habitual, and the strengthened muscles enable her to maintain it always. This brings me to

The Improved Position to be Maintained at all Times.—It is not at all sufficient to give the patient treatment every day for half an hour, and then to let her return home to sit and stand and walk in the same old bad position until the next visit for treatment on the following day. Measures must be adopted to ensure as far as possible that *correct* postures are assumed. Besides precautions as to position in writing, the patient should not stand at lessons, should always have a back at the right height and shape to lean against, and should never be allowed to remain in a bad position if it can be helped. The parents have got to assist in this matter and to continually keep an eye on the patient, at least for the first few weeks. As an example of the way in which the surgeon's influence is kept up at home, I may mention that all patients are required to place themselves against the door for a few seconds in the "best possible position" before and after every meal; a mark-book is kept in which the patient records by a stroke that she remembered to do this by herself, or by a nought that she had to be reminded. This is known as "meal-standing."

Attention to General Health.—Patients are encouraged to take plenty of outdoor exercise, walking, cycling, tennis, etc., to eat plenty of food—they are weighed every fortnight—and to have plenty of sleep.

Subsequent Home Treatment to prevent relapse in the improvement or cure that has been obtained by the surgeon.—To continue to enlist the patient's interest and co-operation in her own case, she is given a "home prescription" of exercises to be done for half an hour twice daily for six months, and then once daily for another six months. She is then examined again, and if there is no relapse, a shortened home prescription is done for twenty minutes daily for another two years. In all cases it is essential to persevere in the maintenance of good positions until growth has ceased.

RESULTS OF THE TREATMENT BY POSTURE AND EXERCISE.

From a critical examination I have made (5) of the notes of 1,000 cases of scoliosis treated on these principles, and every day confirmed by my own observations and experience, I know that in over 83 per cent. a permanent cure is obtained, and that in 94½ per cent. increase of structural deformity is entirely arrested.

Such results should surely be sufficient to induce other members of the profession to give this well-established method a trial, especially as from all quarters we hear of the unfavourable results of other and older methods, and of attempts to introduce new ones. Why will they not do so? I fear it is for two reasons: one is that they have been educated to regard treatment by exercises for any ailment as outside their province, and hardly worthy of their personal attention; and the second, that they fear the treatment may be monotonous and take up too much time. And so the work which should be done by them is handed over to be done by a masseur. After many months they are unable to observe any improvement, and so they apply a support or a so-called corrective jacket, while gymnastic treatment falls still further into disrepute.

I look forward to the time when all forcible and mechanical methods will be things of the past, and every orthopædic surgeon will be treating these cases by "posture and exercise" much in the manner I have here outlined.

REFERENCES.

(1) Author's paper, "The Measurement of Deformity," *Practitioner*, July, 1912.
(2) Dr. Abbott, "Correction of Lateral Curvature of the Spine," *New York Medical Journal*, 1912, xcv., pp. 833-847.
(3) Mr. Tubby, "*Deformities*," etc., 2nd ed. vol. i. p. 424.
(4) Mr. Bernard Roth, "*Treatment of Lateral Curvative of the Spine*," 2nd. ed. H. K. Lewis. 1899.
(5) Author's paper, "Report on a Thousand Consecutive Cases of Scoliosis," *British Medical Journal*, Sept., 1911.

INDICATIONS FROM THE URINE IN TREATMENT OF CERTAIN DISEASES OF THE SKIN. (*a*)

By L. DUNCAN BULKLEY, A.M., M.D.,
Physician to the New York Skin and Cancer Hospital, Consulting Physician to the New York Hospital, &c.

THE urine is a very complex fluid, and reflects the condition of the system from day to day, to a surprising degree and in a manner which is not realised as fully as it should be. If subjected to an absolutely critical analysis of every possible ingredient, it is probable that no two specimens of urine passed by the same individual at intervals of some hours would be exactly alike, as has been shown by many observers, since the publication of the remarkable lectures of Dr. Bence Jones nearly fifty years ago (*b*); it was this book which first seriously directed my attention to the intimate relations between the condition of the urine and various systemic changes.

It is not difficult to appreciate how or why the urine may furnish valuable indications in regard to the treatment of certain diseases of the skin when we recall the anatomical and physiological relations of the kidneys to the system. As I have remarked on another occasion (*c*), "After the blood has received the elements of nutrition from the stomach and intestines, and has been prepared and modified by the various organs, including the internal secretions, it also receives excrementitious substances from the tissues, largely through the lymphatic system. Then, after it has been aerated and purified by the lungs, and is on its way through the aorta to nourish the body, a small artery takes, as it were, a sample of this arterial blood to each kidney for final judgment as to its quality and for the removal from it of injurious substances, as far as possible; this relatively small portion of purified blood is then returned to the vena cava and thus again to the lungs, for further oxidation. It is to be remembered that only a relatively small portion of the blood flows at one time through the kidney (even under forced diuresis it is estimated

---

(*a*) Read at the Seventeenth International Medical Congress, London, August 7, 1913.

(*b*) Jones, H. Bence. Lectures on some of the applications of chemistry and mechanics to pathology and therapeutics. London, 1867.

(*c*) Bulkley, "Diseases of the Skin in Relation to Hepatic and Renal Disorders," *Journal of Cutaneous Diseases*, November, 1912.

that only one-twentieth of the blood passes through the kidneys in a minute), while the great bulk of it passes unchanged directly to nourish the brain and the rest of the body, waiting for its further purification by the kidneys. These organs might, therefore, be spoken of as the final judges of what perfect blood should be, as their function is to eliminate substances injurious to the body."

The urine, therefore, is the most perfect exponent of the catabolism and anabolism of the system, and too much stress cannot be laid upon the importance of its repeated and complete volumetric analysis in connection with the treatment of very many cases of diseases of the skin; for by it we may learn, daily if we will, much which cannot be otherwise ascertained in regard to the manner in which the nutritive processes are carried out, and the character of the blood which induces the cutaneous disorder.

It is understood, of course, that our study relates to the results of *functional derangements* of the urinary secretion, and not to evidences of organic disease of the kidneys; for albumen and casts, and even glycosuria, play but little part in the urinary changes which we are considering. On the contrary, very many of the abnormal conditions of the urine to be considered later have very little if anything to do with the integrity of the kidneys, but rather represent a failure in some portion of the system to elaborate perfect blood, and they would rather indicate a proper and faithful performance of kidney functions, in attempting to remedy a faulty blood state, and remove injurious elements.

These abnormal conditions, then, relate to volumetric derangements in the many constituents of urine which might ordinarily be considered normal, but which under minute analysis is often found to be in one way or another quite different from the standard of that belonging to perfect health. This is so constantly found to be the case among the thousands of analyses which have long been made in my laboratory in connection with private patients, exhibiting many different cutaneous ailments, that for years I have leaned very heavily on my repeated quantitative urinary analyses, in different cases, for guidance in regard to the proper internal measures required. In this brief paper I cannot attempt to analyse the mass of data collected, but I would like to so strongly impress the practical teaching that I have had from them that others will be inclined both to study the subject and also to reap the benefit which I have obtained in practice, from a close consideration of the urine in its relation to certain diseases of the skin. For this purpose I have had collected the data from some three thousand (2,952) analyses made in my laboratory since 1909, and will utilise them as best I may in the brief time at my disposal. The analyses have been made according to Purdy (*a*), and his percentages have been used.

It is recognised, of course, that the condition or composition of the urine may be influenced greatly at any time by the character and quantity of the food and drink consumed, also by the amount of oxygen inhaled, by physical and mental exercise, and by the action of various organs, etc., etc.; therefore in estimating the importance of any particular change found in its composition, much thought and care must be exercised in order to interpret correctly the significance or bearings of the same upon the conditions present, whether it be on the skin or any portion of the body, and to apply the proper remedies, whether dietetic, hygienic, or medicinal.

In general medicine the relation between the skin and the excretion from the kidneys is a matter of everyday observation and consideration. Thus, all are familiar with the temporary changes which may take place in the urine from a chilling of the surface, in fever, before and after an attack of gout, etc., as also with the dry, parched skin in chronic Bright's disease and glycosuria, likewise with the relief afforded to congested kidneys by a free diaphoresis, &c., &c. But we have been slow to recognise the relation of deficient or deranged kidney excretion to the integrity of the skin, and its functions, although occasionally very strong evidence of this has been adduced by individual observers, which we cannot here dwell upon.

Unquestionably much of the failure to utilise the indications from the urine in the treatment of certain diseases of the skin has been due to the too prevalent inclination to regard all cutaneous affections as purely local conditions, or idiopathic diseases, in which the skin is alone concerned, and as due to external causes or of parasitic origin.

While I recognise fully the influence of microbic agencies in connection with very many diseases of the skin and of other organs, I also claim that it is very short-sighted to disregard, as is often done, the soil, or physical condition of the individual tissue in which the micro-organism lodges and finds its nourishment. Certainly in many lines the pendulum of medical thought, if not practice, is swinging away from a purely local ætiology to a recognition and study of the constitutional relations of disease; thus, in tuberculosis we are slowly coming back to recognise the truth of the teaching of Sir Andrew Clark who many years ago used to say: "Gentlemen, do not pay so much attention to the lungs; take care of the stomach and the lungs will take care of themselves," and even in cancer there is a strong tendency to regard the perversion of cell growth as due to faulty metabolism, principally of protein elements.

It is high time, therefore, for the dermatological world to review its basis of thought, and, if necessary, to revise its method of procedure, in regard to the care of many of the lesions on the skin which may require treatment. Sir William Osler has rendered great service by his careful and intelligent work along certain dermatological lines, in regard to the connection of skin lesions with internal disorders, thus showing the direction toward which studies should be made if we are to arrive at a true conception of many cutaneous affections and their cause.

In the clinical study of the urine observers of late years have commonly dwelt on the importance of making only tests of the entire urinary output of the day, insisting that percentages signify nothing, unless they relate to the whole amount of urine passed in the twenty-four hours. While I grant that this is often very important, and while in many cases I have the entire daily urine saved and measured frequently, even over long periods of time, and samples of the same analysed, in the majority of cases I find greater benefit from the older method of analysing that passed at bedtime, or at 10 o'clock, and that passed in the morning, or at 7 o'clock; in this way we get a separate estimate of the result of the work and food of the day, the *urinum cibi* of older writers, and that passed after rest and fasting, the *urinum haustus*. The contrast between the two is often surprising, and by adding the figures from each and dividing the result, we can get a very fair idea of the character of the total output. Bouchard, (*a*) who remarks, "We are only on the threshold of discoveries which remain yet to be made in the chemical analysis of the urine," has made some interesting experimental studies on the toxicity of the urine, which are very instructive. He summarises one part of his studies as follows: "What is certain is, that during the day the body forms a substance which, when accumulated would induce sleep, and that during sleep it elaborates, instead of this narcotic substance, a convulsive substance which, when accumulated, could produce muscular twitchings and induce waking." He had previously shown experimentally that a concentration of the day urine, when injected into animals, in sufficient quantity for their weight, caused death by coma, while a concentrated night urine caused death by convulsions. This subject is a most interesting one, which cannot be gone into now, but this much is given in order to support the view that the analysis of different portions of the urine, taken at various times a day can often yield important and valuable data in

---

(*a*) Purdy, "Practical Urinalysis and Urinary Diagnosis," Philadelphia.

(*a*) Bouchard, "Auto-Intoxication in Disease." Philadelphia, 1906. P. 62.

regard to the functioning of different parts of the organism and the nutrition of the system, including the skin.

Quantity.—The actual quantity of the urine passed each twenty-four hours may, of course, vary greatly according to the action of the skin and lungs, and the quantity of fluid taken into the system; but we all know that there is a general average quantity which should be passed in health, about 45 ozs. for a person of 150 lbs., while in diabetes and various forms of kidney disease the normal quantity may be enormously increased or diminished, as also in certain nervous states. Few realise, however, that with only functional derangement of the system the daily quantity may vary very greatly, as I have watched it in many patients with skin ailments. Thus, in a lady, weighing 160 lbs., with lichen planus, I have had the urine measured almost daily for many weeks, and in the weekly record it will sometimes run over 70 ozs., and perhaps the next day only 34 ozs. Another lady, weighing 163 lbs., with severe psoriasis, passed but 13 ozs. on the day before her visit, and on other days had passed 11 and even as little as 7 ozs. of urine in the 24 hours; and many instances could be given where there was very imperfect and deficient urinary secretion in those who supposed they were in good health, except for the eruption.

Specific gravity.—While, as a rule, the specific gravity of urine is supposed to depend upon the quantity passed, and this again largely upon the amount of fluid taken into the system, this is by no means the universal rule, for it may vary at times very greatly according to the state of the system. Thus, I have found it 1.041, with no sugar, and as low as 1.001, with no actual kidney disease. And it is just this variation in the quantity and specific gravity of the urine from time to time which, if quickly recognised and intelligently interpreted, will aid much in understanding the systemic and metabolic disturbances upon which many diseases of the skin depend. And as these wrong conditions of the urine are corrected by appropriate treatment, dietary and medicinal, an eruption which had previously proved rebellious will yield favourably to local measures which had before seemed ineffective; this, of course, applies mainly to such dernatoses as eczema, psoriasis, acne, lichen planus, urticaria, some bullous eruptions, &c.

Volumetric acidity.—Closely associated with the quantity and specific gravity of the urine, and of even greater importance as a guide in connection with the treatment of certain diseases of the skin, is the actual volumetric acidity frequently measured, which can be done quite easily by the oxalic acid and phenolphthalein test.

Bearing well in mind what was previously said in regard to the formation of the urine directly from the completed arterial blood, on its way to vitalise all the tissues of the body, it can readily be understood what an important indicator this excretion is in determining the exact state of the blood, both as to its excrementitious substances and its alkalinity. With a standard of about .300 for the average acidity of normal urine, it must certainly make a great difference in regard to the wellbeing of the individual, as well as in the condition of the skin, when the acidity is found to be .600 or .800, or even 1.386, as I recently found it in a very bad case of inducted acne; or when it is reduced to .126 or even .063, or when it is even strongly alkaline, and that without bladder complications.

Excessive urinary acidity is frequently observed in connection with many diseases of the skin, eczema, lichen planus, psoriasis, acne, and others, and eruptions will often be seen to be red and congested and the itching increased when there is high acidity of the urine, and to be relieved when this is reduced by appropriate treatment; for the abnormal acidity of the urine but reflects a lessened alkalinity of the blood circulating through the skin. On the other hand, a greatly reduced acidity of the urine, or persistent alkalinity, not dependent on bladder trouble, may be quite as harmful; and I recall a case of urticaria which proved rebellious, until on analysis of the urine I found it to be .063, almost neutral, when the eruption was arrested promptly on the free administration of urotropin, bringing the acidity of the urine up to normal.

Urea.—As the principal end product of the metabolism of protein substances, urea, or its proper excretion, may be of great importance in connection with certain diseases of the skin. In perfect health, with a mixed diet, the urea should be pretty constant at 2 per cent. in the urine, and nearly an ounce should be passed each day. But careful analysis in many patients with certain skin affections shows the greatest variations, from two or three times the normal amount down to an almost total absence of urea, indicating extremes of deranged nitrogenous metabolism. In a case of dermatitis herpetiformis, Hardouin (*a*) made a daily analysis of the urine of 24 hours, over a period of six months, and found that on eight occasions, at pretty regular intervals, there was a fresh eruption after a period of diminished excretion of urea; the outbreak began a few days after the lowest point of urea elimination was reached. In a second case the onset of the attack also coincided with the lowest point of urea excretion; this has been verified by others, and also in a case in the New York Skin and Cancer Hospital.

Uric Acid.—In spite of the professional discredit into which uric acid itself, as a factor in disease, has fallen, there is little question but that the work of Haig (*b*) has served a good purpose in directing attention to the harmful results of a faulty metabolism of nitrogenous products. While its accurate quantitative estimation in the urine is difficult, it happens that sometimes the indications from its excretion are very suggestive.

Thus, in my own personal case, as already reported (*c*), the uric acid and urea in the urine were actually higher after a five days' experience with a non-protein diet of rice, bread, butter, and water, than they were on the night and morning before this was undertaken; showing that without the introduction of any exogenous protein or nuclein the blood took up from the tissues effete nitrogenous elements, and made them to appear in the urine, even in a greater degree than before. With this relief to the system the extremely distressing vesiculo-bullous eruption on the hands, to which I had been subject for a good many years in the summer, often lasting many weeks, disappeared completely by the expiration of this five days' strenuous diet, without the use of any remedies, internal or external. I may add that the same experience has been repeated in myself with the recurrence of the eruption in summer three or four times.

Indican.—The ætiological significance of an excess of indican in the urine has not as yet been clearly worked out, but it is being recognised more and more as a valuable indicator of putrefactive changes occurring in proteids, mainly in the large intestine. It is interesting to observe, however, how frequently it appears in the urine in connection with outbreaks of eczema, urticaria, acne, and some other skin affections, and how they will improve under the same local treatment when this urinary error is removed by appropriate measures, dietary and other. As far as I know no satisfactory explanation has been given as to how the putrefactive changes in the intestine affect the skin, but intestinal auto-intoxication is a factor which has to be considered and overcome, in connection with many affections of the skin, and the variations in the amount of indican in the urine afford a most satisfactory means of determining the existence of this condition.

Sulphates.—These, like indican, may often prove a good indicator of the proper metabolism of proteid substances, and they may sometimes be present in

---

(*a*) Hardouin, "Ann. de Derm. et de Syph.," 1910, p. 1137.

(*b*) Haig, Alexander. "Uric Acid as a Factor in the Causation of Disease," London.

(*c*) Bulkley, "Personal Experience with a Very Restricted Diet (Rice) in Acute Inflammatory Disease of the Skin." *Medical Record*, January 28th, 1911.

excessive quantity even when no indican is found. While the normal standard here accepted is 1 per cent., we have frequently found it 2, 4, 6, and even as high as 22 per cent., especially in psoriasis; this would indicate an intake of nitrogenous matter far beyond the demands of the system or the power of its proper assimilation.

Chlorides.—The estimation of the chlorides in the urine sometimes affords suggestions of value in regard to the treatment of certain cutaneous affections, and while a moderate excess or diminution from the average has no great significance, being derived from the food, a great excess often indicates that the individual consumes more food than the system requires, while a great diminution may signify the need of increased nutritive matter. Among our analyses, in one case, that of a young lady, æt. 20, with psoriasis, there was 50 per cent. of chlorides, and in a lady æt. 60, with eczema, there was but 2 per cent. The immense importance of chloride of sodium in the economy, in its relation to the gastric secretion, blood, and tissues, would imply that a knowledge, through the urine, of its supply in the blood and its proper elimination must be of value in connection with disease, whether of the skin or other portions of the body; and our practical experience has demonstrated this to be the fact time and again in many skin affections.

Phosphates.—These being also largely derived from the food are subject to considerable fluctuations in the urine in normal persons, and some care is required in judging the results of analysis. But phosphates are known to be largely increased in the urine in certain chronic diseases, as of the bones, nervous tissue, &c., and diminished in many other conditions, and the greatest variations were continually found in our cutaneous cases, in a manner often quite inexplicable. With an accepted average normal standard of 10-12 per cent., there were many specimens in which only a trace was found, while the highest recorded was 26 per cent. Continued increased elimination will often indicate a waste of nervous tissue, which may be of the utmost importance in some dermatoses: while with a prolonged greatly diminished excretion we have a failure of nutritive powers which is of equal importance in other skin affections.

There are other ingredients of the urine, normal and abnormal, which have not been so fully studied, but which may be of importance in some conditions of the skin; such are the colouring matter, which has been shown by Bouchard to be poisonous, creatinin, skatol, acetone, β-oxybutyric acid, &c. The thought naturally arises that if derangement in some of the urinary elements which have been carefully observed is so important in connection with certain diseases of the skin, can it not be possible that some of these other ingredients of the urine may by their derangement, act in the same or different manner, in inducing some of the skin lesions which are often so troublesome?

There are yet a few urinary changes observed microscopically which should be mentioned as affording indications for treatment in certain diseases of the skin.

Urates and Uric Acid.—Heretofore we have spoken of uric acid as determined by quantitative analysis, but in many cases it will be grossly represented by masses of urates or even uric acid crystals soon after passing. These are always of some significance in connection with certain skin affections, but should be carefully interpreted; for, like the uric acid showers after attacks of gout, they may represent the effort of nature to throw off accumulated, effete, nitrogenous matter. When such deposits persist they indicate perverted nitrogenous metabolism, which should be attended to quite as much as other urinary derangements, if the best results are to be obtained in eczema, psoriasis, acne, and other affections.

Oxalates.—Oxalate of lime was formerly regarded as of much more importance, as a urinary deposit, than it is at present, for it is now recognised that it may come from an excess of certain vegetables and fruits in the diet. But when excessive or persistent it signifies a process or state of sub-oxidation which should not be neglected in connection with certain affections of the skin. Thus, in acute lichen planus and pruritus ani, oxaluria is an indication for the free administration of nitric acid, which will often prove of the most signal value in these troubles.

It would be interesting and highly instructive and profitable if we could point more specifically to changes in the urine which necessarily accompanied definite diseases of the skin. But, unfortunately, this is not possible in our present state of knowledge; we must have vastly more carefully recorded observations. Undoubtedly many have the alterations in the urine which we have mentioned, with no eruption, but the same may be said in regard to many diseases of other organs; no one doubts the connection between uratic deposits and true gout, and yet the former are continually found without the latter. Xanthoma diabeticorum is recognised as associated with and probably dependent upon glycosuria, and yet how exceedingly rare it is in diabetes. There are undoubtedly concurrent causes of disease, of which we as yet know but little and it is quite possible that closer observation and analysis will show further changes in the urine, or combinations of changes, which may throw light on the pathogeny of some affections of the skin. In the present communication I have only endeavoured to contribute my mite to this most interesting, instructive and profitable line of investigation, and urge its further elaboration; for, of the practical importance, along therapeutical lines, of the matters which I have presented my daily experience makes me continually more positive.

One more thought. Mention has been made of a number of more or less acute and some chronic cutaneous affections in regard to which functional disturbances in the kidney excretion have been observed to be of significance. Is it not probable, therefore, that careful study will demonstrate the same to be more or less true of still other eruptions which have not thus far been investigated in the direction, and that possibly in most cases where the skin is in any way diseased there may be some metabolic errors, which may be evidenced in the urine, if sufficient time, patience and skill are employed? The notorious rebelliousness and proneness to recur of many affections of the skin should lead dermatologists to look away from a purely local ætiology, and, with a broader view of medicine, seek for the underlying causes, which, as in diseases of other organs, are often found to depend on a defective metabolism, which is commonly indicated by defective or deranged urinary secretion.

SOME ABNORMALITIES IN BREAST MILK AND THEIR TREATMENT.

By HUGH H. RIDDLE, M.D.Cantab.

A constant low fat percentage or a decrease in amount in the nursing mother's milk has generally been considered an unanswerable argument in favour of substituting artificial feeding for Nature's own method, *i.e.*, breast feeding.

However convinced the physician may be of the infinite superiority of breast feeding over bottle feeding as a general rule, a sudden cutting off of the supply or a failure of the infant to make a proper weekly gain in weight in practice usually forces him to the conclusion that, under the special circumstances, a change to bottle feeds (to which the requisite amount of additional cream can be readily added) is not only justifiable but absolutely imperative.

Where a gradual decrease in the supply of mother's milk takes place such measures as increasing the fluids in her diet, ordering more rest, etc., sometimes are efficient. Where there is complete cessation of the flow, however, something more radical is needed to stimulate the glandular structures into taking up again their interrupted functional activities.

Where the milk is normal in amount but deficient in fats there are two classic alternatives to resorting to bottle feeding: (1) increasing the nitrogenous elements in the mother's diet while cutting down her exercise, and (2) giving spoonfuls of cow's cream to the infant after or immediately previous to each breast feed.

In actual practice both these alternatives frequently fail to produce the desired effect. The commonest result of the "stuffing" treatment of the mother is a digestive upset which is frequently the end of all attempts at nursing her baby, while the spoon feeds with cream often lead to undue sickness in the infant, with the appearance of curds and numerous small fat particles in the stools.

Tables I. and II. below give the results of a series of experiments carried out in the past six months at the Queen Charlotte's Hospital with a preparation known as Lactagol, which is claimed to act as a direct galactogogue, increasing both the amount of milk and the fat ratio.

To Dr. Arthur Stabb, Physician to Queen Charlotte's, I am indebted for the facilities allowed me for observing in the wards a number of his own patients under lactagol and for recourse to his case notes. In the series of observations on out-patients I have to thank Dr. J. B. Banister for his invaluable assistance in carrying out the analyses in the Queen Charlotte's laboratory

Lactagol is a dry extract of cotton seed containing the active constituents of the seed in a concentrated form. For increasing the amount of milk secreted or raising to the normal a deficient fat ratio it was given in teaspoonful doses in milk three times a day.

The subjects of the first experiment (Table I.) were taken in sequence from the in-patients at Queen Charlotte's, the only common characteristic being a low fat ratio. The analyses were made in the Queen Charlotte's Pathological Laboratories :—

TABLE I.

Case No.	Date of 1st Analysis.	Fat Percentage.	Time on Lactagol.	Fat percentage at 2nd Analysis.	Fat Increase.
1	4th day	1.8	7 days	2.8	1.0
2	4th ,,	1.6	7 ,,	3.0	1.4
3	5th ,,	1.8	7 ,,	2.8	1.0
4	5th ,,	2.4	7 ,,	3.4	1.0
5	5th ,,	2.6	7 ,,	3.6	1.0
6	5th ,,	2.0	7 ,,	3.8	1.8
7	5th ,,	2.2	10 ,,	2.6	.4
8	5th ,,	2.2	5 ,,	3.0	.8
9	5th ,,	1.9	7 ,,	3.4	1.5
10	5th ,,	2.2	7 ,,	3.0	.8
11	5th ,,	2.8	7 ,,	3.6	.8

Carter and Richardson in 94 samples of breast milk examined found an average of 3.07 per cent. of fat in the early months of lactation. The average for these 11 cases after the lactagol is 3.18 per cent.

The second table shows the results when the lactagol was given not at the beginning of the lactation but at anything from two to four weeks after the birth of the infant. The mothers here, after samples of their milk were taken for preliminary analysis, were given supplies of lactagol to take at their homes. After the week's supply had been used up they returned to the hospital for the second analysis of the milk :—

TABLE II.

Case No.	Day of 1st Analysis.	Fat Percentage.	Time on Lactagol.	Fat percentage at 2nd Analysis.	Fat Increase.
12	21st day	2.8	7 days	2.8	—
13	24th ,,	3.2	7 ,,	3.4	.2
14	19th ,,	2.4	7 ,,	3.6	1.2
15	28th ,,	3.6	7 ,,	3.6	—
16	15th ,,	2.8	7 ,,	3.8	1.0
17	18th ,,	3.6	7 ,,	4.0	.4
18	10th ,,	3.0	7 ,,	3.8	.8
19	14th ,,	3.2	7 ,,	3.0	.2
20	14th ,,	1.8	7 ,,	3.2	1.4
21	13th ,,	2.0	7 ,,	3.6	1.6
22	12th ,,	2.2	7 ,,	3.8	1.6

In those cases, such as numbers 13 and 15, in which the fat percentage was about normal (3.2 and 3.6 respectively) at the start of the taking of the lactagol the increase was slight or none at all. On the other hand, those mothers whose milk showed a serious deficiency in fat (as for example Nos. 20, 21 and 22) showed a marked rise in the fat ratio after the week's taking. The average fat percentage of the milk of these 11 cases (which were not selected, but were the whole number who could be induced conscientiously to carry out the treatment and to report themselves for analysis) was, at the finish of the week's course of lactagol, something over 3.5, against Carter and Richardson's average of 3.07. In addition to the above series of trials on the twenty-two cases taken in sequence, lactagol was also given in a number of special cases both in private practice and at Queen Charlotte's, in which the milk was either deficient in quantity or patently poor in quality as shown both by analyses and by the failure of the infant properly to gain weight.

Case 1 (private), Mrs. E. S., primipara, æt. 22, twin girls, premature (7½ months). Milk secretion began on fourth day. Normal in amount on sixth. On seventh began to lessen. On ninth was unable to get even a half-ounce of milk with breast-pump for analysis. Babies put on bottles plus breast feeds every two hours. On tenth day one ounce milk obtained by breast-pump. Analysis showed 1.4 per cent. of fat. Mother put on lactagol same evening. By next evening (11th day) after four doses of lactagol breasts full and milk oozing. Each infant satisfied with two hour breast feeds from then on till time of writing (6th week). Second analysis on nineteenth day, after ten days of lactagol, showed fat percentage of 3.6.

Case 2 (private), primipara, æt. 26, premature infant, eighth month, mother an alcoholic, wife of an innkeeper. Milk normal in quality and amount until twenty-first day, when it suddenly ceased. Cessation of milk roughly coincided with the mothers' return to her duties behind the bar. Infant immediately put on bottle. As the infant failed to thrive on artificial feeding, the mother on the fourth day after cessation of her milk was put on lactagol. After the third dose the milk reappeared and, on the third day of taking, the bottles were given up entirely. The infant was breast fed exclusively from then on until the eighth month. The lactagol was taken for periods of two or three weeks with fortnight intermissions from the second to the seventh month.

Case III. (Queen Charlotte's), I.C., æt. 25, primipara. This case instances well the rapid action of lactagol in cases where from the start the milk has been deficient in quantity. The infant had a harelip utterly preventing suckling. From the start the milk has been drawn off with a breast pump.

On the fourth day attempts were made by the nurse at two hour intervals to draw off milk, but not more than three or four drachms could be obtained. On the fifth day the flow not improving the patient was placed on lactagol. On the sixth day and from then on until discharge the nurse had no difficulty in drawing off from an ounce-and-a-half to two ounces at each feeding time. A special feature of interest here was that the drying up of the milk which not infrequently follows when the breast pump must be continuously used instead of natural suckling apparently had no effect in curtailing the flow.

Case IV. (Queen Charlotte's), E.F., æt. 36, twins. This woman, a healthy multipara, had had ten children previously. The first six she had had no difficulty in nursing to full nine months. The next four had been each nursed for three weeks or a month, after which bottle feeding had to be resorted to. The twins weighed respectively 5 lbs. 12½ ozs. and 6 lbs. 3 ozs. at birth. After the normal loss in weight occurring in the first three days the small quantity of milk observable in the breasts on the fourth day and fifth day suggested the advisability of giving lactagol. The patient was ordered a teaspoonful three times a day. On the seventh day both infants had regained their birthweight, and from thence on kept up a steady gain.

Instead of following the ordinary procedure of alternating breast feeding with bottle feedings, the mother for the three weeks she was in the hospital was able to give each infant the breast every two hours without any apparent strain on her own system and with most beneficial results to the two infants.

Case A. G., æt. 31, primipara. Cæsarian section. Here the lactagol was given as a precaution against any scarcity of milk which might result from the shock of the abnormal method of birth, and because of the relatively greater value of what will probably prove to be the mother's only child. An abnormal loss of weight occurring the first three days (8 ozs.) also suggested the use of the lactagol. A mixture of one part cream to three parts water and two or three bottles a day were also given in addition to the breast feeding. The lactagol was begun on the fourth day.

	Weight.			Weight.	
Day.	lbs.	ozs.	Day.	lbs.	ozs.
1 ..	7	4	8 ..	7	4
2 ..	7	1	9 ..	7	6
3 ..	6	12	10 ..	7	7
4 ..	6	13	11 ..	7	9
5 ..	6	15	12 ..	7	11
6 ..	7	0	13 ..	7	12
7 ..	7	2	14 ..	7	13

On the mother's discharge on the twenty-third day the infant weighed 8 lbs. 10 ozs.

Ethel Pigeon, æt. 34, fourth child. The mother had not been able to nurse any of her previous children on account of lack of milk. After the birth of the present baby there were no signs whatever of milk on the fifth day. Lactagol was given in teaspoonful doses in milk and within twenty-four hours the secretion began, the mother nursing the baby comfortably at the time of discharge from hospital. On examination the breasts were well-rounded and firm, large but not fat, with well-formed nipples, in short the typical healthy breast of the normal nursing mother.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Radical Cure of Hydrocele.—Mr. Willmott Evans operated on a case of hydrocele. The patient was 37 years of age, and for the last twelve years he had suffered from hydrocele of the left testis. It had been tapped many times, but the fluid had always re-accumulated, and in the summer time the size of the swelling grew very troublesome, and he wished to have it permanently cured. The diagnosis was simple: fluctuating swelling in the scrotum almost surrounding the testis and translucent to light.

The patient was anæsthetised. Mr. Evans swabbed the skin of the scrotum with acetone and then with a 2 per cent. solution of iodine. Then he made an incision at the upper part of the scrotum over the pubic crest; it was about two inches in length. The assistant then pressed the swelling upwards towards the incision, and the glistening parietal wall of the tunica vaginalis was seen. It was seized with forceps and a small opening was made in it, through which the contents escaped; it consisted of straw-coloured hydrocele fluid of the usual kind. The empty sac was drawn through the opening and examined, and the parietal wall of the tunica vaginalis was found to be distinctly thickened. With scissors the greater part of the parietal layer of the tunica vaginalis was then cut away, only a small portion being left close to the testis. During this, great care was taken to prevent any injury to the vas deferens. All bleeding vessels were tied and the testis was returned into the scrotum. Silk sutures were inserted and a gauze dressing applied.

Mr. Evans said that in a few cases a hydrocele effusion will disappear spontaneously. This is the case especially in infants, in whom tapping is rarely required. In some other cases, especially where the hydrocele is the result of a definite trauma, a single tapping is sufficient for a permanent cure; but in most cases of hydrocele it will be found necessary to continue the tapping indefinitely as often as the fluid re-collects sufficiently to prove troublesome. In elderly and old people who do not lead active lives, and who may not be in sound health, it is probably best to recommend tapping at intervals of six months or so rather than to advise the patient to incur the risks of an operation. In a certain proportion of cases the injection of liquids into the sac may suffice for a cure, but it is impossible to guarantee in any individual case that this method will be effective; still, it has its uses, and may well be employed where the patient refuses to submit to radical cure. Several methods have been employed for curing radically a hydrocele, but that used in this case was in his opinion the best. The accumulation of fluid in the cavity of the tunica vaginalis is due to a disturbance of the equilibrium between secretion and absorption: in health the tunica vaginalis is always secreting serum to lubricate the surface of the testis and to prevent friction between it and the skin, but the amount of serum secreted is almost exactly balanced by the amount absorbed, so the quantity remaining in the cavity is very small. In hydrocele this equilibrium is upset: either the amount secreted is increased or the amount absorbed is diminished, or both these factors may act at the same time, with the result that hydrocele fluid accumulates in the cavity. In the operation that had just been performed two things had been done: by the removal of almost the whole of the parietal layer of the tunica vaginalis the secreting area had been greatly reduced, so that the amount of fluid secreted was greatly reduced, and at the same time the removal of the parietal layer had thrown the cavity of the tunica vaginalis into free communication with all the numerous lymphatic spaces of the scrotum. In this way not only is the secreting area much diminished, but the absorption area is vastly increased, so that the equilibrium between secretion and absorption is re-established. There is one other important point—where should the incision be placed? It is on the whole better to put it as high as possible, where it is less likely to get contaminated and where the character of the skin makes disinfection more thorough. It may be perhaps as well to mention, he said, that very thorough hæmostasis is desirable, as the loose connective tissue of the scrotum lends itself readily to the formation of a hæmatoma.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Ophthalmology.

Meeting held Wednesday, December 3rd, 1913.

The President, Sir Anderson Critchett, Bart., C.V.O., in the Chair.

Mr. Cole Marshall showed a case of "staphyloma posticum verum."

Mr. Leslie Paton two cases of "rodent ulcer" treated with CO_2.

Mr. Macnab a case of "infiltration in and around the iris."

Mr. Grimsdale a case of "microphthalmos."

GLASS-WORKER'S CATARACT.

Mr. Herbert Parsons showed specimens of experimental glasses prepared by Sir William Crookes, O.M., P.R.S. They were synthetically prepared glasses. Sir William Crookes had two soda fluxes made by Messrs. Powell, and added to these specimens of flux, certain metals in definite proportions. He then made the glasses in small quantity, cut slices, polished them, and investigated their properties in reference to transmission of heat, and he had taken photographs of the absorption of ultra-violet rays with a quartz spectrograph to test their transmission of luminous rays, and estimated their colour with the tintometer. In order to test with the greatest possible delicacy, Sir William invented an exceedingly delicate instrument named the radiometer balance. He made a glass which cut off 96 per cent. of the heat. The subject was of much wider importance and applicability than the research seemed at first to show.

Dr. Morrison Legge, of the Home Office, spoke at considerable length on the subject. He said glass-worker's cataract was brought to his notice as a member of the Departmental Committee which sat to inquire into the question of compensation for industrial diseases, in 1906; and much valuable information was forthcoming from a very intelligent secretary of a glass-workers' association. The late Mr. Simeon Snell set himself to collect information on the subject, but his method was not calculated to yield the truest results, for he circularised the manufacturers themselves, asking how many cases of cataract they had known among their workers. As a result Mr. Snell came to the conclusion that cataract was not specially prevalent among glass-workers. A systematic examination of workers for the condition might result in men having the condition being discharged, whereas it took ten to twelve years to prove disabling. He, Dr. Legge, went himself into the glass factories of St. Helens and Sunderland, and he was very much impressed by the number of men who came up showing this cortical cataract, varying in size from a pin's head to what looked like a large blot of ink in the centre of the pupil; it was quite different from the peripheral striæ in senile cataract. He was struck by the small degree to which the eyesight of the patients suffered. In only very few cases were there opacities in the cornea.

The President, in thanking Dr. Legge for attending and making his valuable contribution, said that in Italian glass works the workers were much nearer the flame, and it was very rare indeed to find a worker of forty years of age whose cornea was not affected.

Mr. N. Bishop Harman read a contribution, and showed photographs, on an

OPERATION TO IMPROVE THE EFFECT OF AN ARTIFICIAL EYE.

His object was to render the loss of an eye less conspicuous. He remarked that, other things being equal, the effectiveness of the disguise was controlled by the shape of the palpebral fissure. With a small fissure, the shell was effective; with a wide and generous form of fissure the shell provided insufficient support, so that the lids dropped away, deep sulci marked the lids, and the shell was exposed in its naked bareness. The operation aimed at doing for the large-eyed what the small-eyed had by nature. The lids were secured in a clamp devised for the purpose, then split at the inter-marginal space, and the raw surfaces brought together so as to shorten the fissure. The lid surfaces were protected from scarring by the suture, by rubber guards that also afforded elastic pressure. On the fourth day the suture was removed and any adjustment of an excessive effect could be made. The effect of the narrowing of the fissure was to draw forward the lids, slightly cover the shell, and shadow it, so that in place of the fixed stare there was a slight and subtle wink. The pull of the lids against each other tended to smooth out the deep sulci above and below; the relative movement of the shell was also improved. The effect was to make the beholder of the face concentrate on the natural eye, which became the fixative feature of the face. In the words of an early poet, it became a face "with one suspicious and one drooping eye"; the slightly winking, drooping eye was a companion inconspicuous by reason of its lesser character.

Mr. W. M. Beaumont read a paper on iritis, rheumatic and toxæmic. He said doubts had been thrown upon the existence of a rheumatic form of iritis, and modern views of the nature of rheumatism seemed to coincide with those doubts. The author, earlier, had been a sceptic, and his views had found expression on several occasions in the columns of the *British Medical Journal*. Poynton's and Paine's invaluable researches, based on bacterial experiment, had stimulated interest, whilst the papers read at the annual meeting of the British Medical Association and at the International Medical Congress brought the subject again to the front. A difficulty arose in Poynton and Paine's results because iritis associated with acute rheumatism was so extremely rare that it might be considered negligible; whereas these investigators had been able, on at least two occasions, to produce iritis by the intravenous injection of the products of rheumatic infection into rabbits. A negation of rheumatic iritis seemed to be a natural corollary of the "passing" of rheumatism, and it seemed to the author that their experiments almost proved too much. He thought that a more extended view of the frequency of toxæmia, and especially of gonorrhœa, as a cause of iritis, would be the outcome of further research. But as, in the past, it had been usual to parcel out the different causes of iritis, without including toxæmia as one of them, it was clear that if that factor were generally accepted, it must very considerably reduce the percentage of some of the fully recognised causes. He thought that the class that would be materially reduced would be the nondescript one "rheumatic."

The paper was discussed by Mr. Lawford, Mr. Herbert Fisher, Mr. Cobbledick, Mr. Mayou, Dr. Thompson, and the President, and the author replied.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held December 3rd, 1913.

Prof. Russell, Vice-President, in the Chair.

Dr. Claude B. Ker opened discussion on

ISOLATION AND QUARANTINE PERIODS IN THE MORE COMMON INFECTIOUS DISEASES.

A full abstract of the author's paper on the subject will be found in another column under the heading of "Original Papers." In the discussion that followed,

Dr. Melville Dunlop said that the matter of infectivity and quarantine periods was of great importance both to the profession and the public. The regulations regarding schools were very diverse, and some of them were very difficult to understand. If all the rules were abolished he doubted if the results would be very different. Sir Henry Littlejohn had told him that the crowded district round the old fever hospital in Edinburgh was the most free from fever of all parts of the town. He agreed with Dr. Ker in thinking that the infectivity of measles was entirely during the stage of invasion, and he was in accord with him in regard to its severity as regards mortality and sequelæ. The infectivity of whooping cough ceased with the whoop. The whoop often ceased during an attack of pneumonia. Such cases were often admitted to hospital and did not spread infection. The infectivity of chicken-pox might be disregarded altogether. Scarlet fever was now so mild a disease that the difficulty often was to recognise it as a disease at all. He suggested that the Society should appoint a committee to discuss and formulate rules regarding the quarantine periods in infectious disease.

Dr. Meikle said that some information regarding infectious disease in the Edinburgh Board Schools might be of value. The average absence due to infectious disease—cases and contacts—was 4,000 out of a school population of 40,000. Thirty per cent. were due to notifiable diseases. Of the total absence one-quarter were due to measles, one-half to whooping-cough, one-eighth to scarlatina, and one-fortieth to diphtheria. If four weeks were taken as the average duration of absence, that meant a loss of 160,000 attendances, or £400 to £500 in Government grants made on an attendance basis. A relaxation had been made in the case of older pupils in regard to measles, and no ill effects had followed. In non-notifiable diseases they had to rely on hearsay evidence. The difficulty in using incubation periods for education in Board Schools was the unreliability of the parents' statements regarding exposure to infection.

Dr. James said that the rules appeared to be based on the germ theory rather than upon clinical experience. The tremendous drop in infectious disease which took place about 1880 seemed to indicate a change in the type of disease, and their rules required revision accordingly. He quoted statistics of absenteeism from the Merchant Company's Schools, and they all went to show that susceptibility was a more important factor than the germ. In the future a gradual increase in the mildness of disease was to be looked to rather than a stamping out of infection.

Dr. Burn Murdock said that in scarlet fever he felt safe after a contact had remained well for five days. In whooping cough he had never seen infection after the whoop had developed. Measles was not infectious after the rash.

Mr. Ferard, Headmaster of Edinburgh Academy, said that from the headmaster's point of view, infectious disease was an unmitigated nuisance. The only line for him to take was to accept the rules given him and to administer them to the letter. At the same time he felt that these rules were an elaborate locking of the stable door after the steed had been stolen. In such diseases as diphtheria they must take all precautions. A schoolboy might readily hand on the disease to a younger child. On the other hand he might suggest that it was the duty of the schoolmaster to pilot children through attacks of mumps, chicken-pox, and German measles. These diseases were more serious and certainly much more inconvenient when they attacked adults. He would very gladly see all the school regulations regarding infectious disease disappear.

Dr. James Carmichael thought that the certificate of the family doctor was enough to permit a child to attend school after infection. He supported the suggestion that a committee should be appointed.

Dr. James Ritchie said the time was ripe to revise quarantine periods. He felt quite happy about scarlatina contacts after five days, but thought eight should be the quarantine period. He agreed with Dr. Ker about diphtheria. Measles was not infectious after the catarrhal stage, chicken-pox after the crusts were off, nor mumps after the swelling had subsided. He had a difficulty in connection with fomites in scarlet fever.

Dr. Fowler said that in the Royal Hospital for Sick Children they had to obey the rules of the Public Health Department just as much as other people. He thought the incubation period of scarlatina might extend to ten days. He questioned the advisability of trying to prevent young children from taking mumps and chicken-pox. These diseases were more severe in adults. In rubella the question of diagnosis was a difficulty.

It was remitted to the Council of the Society to appoint a committee who should formulate rules in regard to infectivity and quarantine periods.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting held in Sheffield, November 21st, 1913.

The President, Dr. W. E. Fothergill (Manchester) in the chair.

Mr. Miles H. Phillips (Sheffield) showed a case of "Peritoneal Implantation of the Ovum." This patient was operated upon for ectopic pregnancy and a bleeding tube removed. A small nodule was noticed under the peritoneum of the pelvic wall and was excised. This proved to be an ovum covered by peritoneum, except in one spot through which the ovum had probably passed.

Mr. W. W. King (Sheffield) read a paper on the

Serum Diagnosis of Pregnancy,

in which he described his *technique* and gave his results of the examination of 50 cases. 25 pregnant patients all gave positive reactions; 5 others in whom the clinical diagnosis of pregnancy is uncertain also gave positive results. Two recent septic abortions were negative. Out of 18 non-pregnant patients, 2 sera digested placental albumen. His results of the question of the specific character of the ferments showed that the serum of pregnant patients would in some cases digest carcinomatous tissue and *vice versa.*

Mr. Miles H. Phillips (Sheffield) showed specimens of "Parasitic Ovarian Dermoid" and "Papillary Ovarian Tumour."

Mr. Favell (Sheffield) showed a specimen of "large fibro-myoma of the vaginal wall."

Dr. Gray Newton (Sheffield) showed a specimen of "tumour of the vulva."

HARVEIAN SOCIETY OF LONDON.

On Thursday, November 27th, 1913, the Harveian Society of London held a discussion on "The Registration of Venereal Diseases," at which the following spoke:—

Dr. T. H. Craig Stevenson, Superintendent of Statistics, Dr. G. Blacker, Dr. Campbell Williams, Dr. A. Maude, Dr. Reginald Dudfield, Medical Officer of Health, Dr. Leonard Guthrie, Dr. J. C. Dunn, and Colonel Scott.

With the exception of Dr. Dudfield, Medical Officer of Health, all the speakers apparently were against registration, as impracticable, unfair, and useless.

Dr. Maude, of Westerham, pointed out that when this suggestion of Government notification was first discussed no indication had been held out that there would be any protection to the medical man, either for breach of confidence or errors of diagnosis.

It is hoped that the discussion will be published in full.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 6th, 1913.

Cirrhosis of the Liver.

The predominant cause of the cirrhosis of Laennec is alcohol. Tripier, however, demonstrated that alcohol was only the exciting cause, the true cause being tuberculosis. This opinion has been supported by numerous anatomo-pathological examinations and tends to-day to adoption.

As to treatment, says Prof. Pic, of Lyons, the first thing to do is to suppress alcohol in all its forms. The lesions produced by alcoholic impregnation of the liver are of two kinds—cellular and conjunctive, the first leading to hepatic insufficiency, the second to hypertension of the portal system. Hæmorrhage may be a consequence of both these lesions. The medical treatment comprises milk diet, diuretics and opotherapy.

In the pre-ascitic stage the patient may get well provided he has will-power enough to abandon his passion. His drink will be water. After a few days of the milk *régime* he may be allowed eggs and vegetables, but no meat. Where hæmorrhage occurs, due to distension of the portal system, hot sitz baths and warm enemas will be prescribed, and in case of epistaxis the nose will be plugged with absorbent cotton steeped in oxygen water, adrenalin solution, or ferripyrine cotton, while chloride of calcium or serum of the horse will not be omitted. Opotherapy may also be tried (liver extract).

When the ascitic stage is reached, ingestion of fresh pork or veal liver is frequently followed by improvement in the condition of the patient. Six ounces of liver, shredded into vegetable soup, are given each day. If this method is repugnant to the patient, the same amount may be given by the rectum. The liver, cut up into small pieces, is allowed to macerate two hours in cold boiled water, when it is "passed" and given in enema with the yolk of an egg and a few drops of laudanum. The powder of dried liver at the dose of three or four drachms a day is also useful.

Autoseropathy, or the method of Gilbert, of Geneva, has given some success. One or two drachms of the liquid are drawn out with a small syringe, and before completely extracting the needle an oblique movement is given it whereby the ascitic liquid is injected into the neighbouring cellular tissue. The result observed in favourable cases is polyuria, decrease of the liquid, etc.

Diuretics play an important part in cirrhosis with ascites, and may be varied at will. Urea (one ounce daily), calomel (one grain every morning for ten days), cream of tartar.

Cream of tartar, 4 dr.
Syrup, ½ oz.
Water, 6 oz.

A tablespoonful every two hours. Or

Nitrate of potash, ½ dr.
Acetate of potash, ½ dr.
Oxymel of squills, 1 oz.
Inf. of juniper berries, 8 oz.

Lactose or sugar of milk (two or three ounces a day), adonis vernalis and other diuretics.

As to surgical treatment, the most simple operation is that of tapping the liquid, but the operation has to be repeated several times, and finally the patient falls into a state of cachexia and succumbs. Tapping is consequently insufficient to cure alcoholic cirrhosis. Talma and Morison tried to aid the portal circulation by fixation of the mesentery to the abdomen (omentopexia), but with little success, for a patient suffering from cirrhosis cannot, in general, recover; there may be a certain improvement in the symptoms and the evolution of the disease may be retarded, but a cure is impossible.

Revulsives in Consumption.

Revulsives diminish the peri-tuberculous congestion and the bronchial catarrh, favour the absorption of exudations, and have a real action on the seat of the malady.

Tincture of iodine, much employed, acts if only by suggestion on certain localised pains (apex, joints). Linseed meal and mustard have a slow and gentle effect much appreciated by the patients. Dry cupping applied in front in the morning, at the back in the evening, affords a *bien être* in diminishing the dyspnœa and cough. The thermo-cautery is useful in local tuberculosis and chronic pleurisy.

Blisters have also their usefulness. Grancher recommends them in the form of strips three inches long and one inch wide, placed parallel to the clavicle, one in front, the other behind, and left on three hours. Under their influence the number of leucocytes is increased.

Cold water (60° F.) is a very active revulsive; it is also antithermic. It diminishes the frequency of the pulsations, increases their vigour, and calms dyspnœa. It is an efficient sedative of the nervous system, and has a favourable effect on insomnia. The wet pack acts thus very rapidly on the fever and procures sleep.

GERMANY.

Berlin, Dec. 6th, 1913.

At the Gesellschaft für Chirurgie Hr. Karewski discussed the

Clinical Course and Diagnosis of Retroperitoneal Lipoma.

In the case related he said there were all possible kinds of adhesions. The sole characteristic sign was the retroperitoneal situation. 110 cases had been collected and described by Lobstein, from which the following train of symptoms had been observed. The majority of the cases were in women, as it was in them that the greatest tendency to the affection was met with. These tumours were frequently mistaken for ovarion cysts. The affection ran its course either without symptoms or with symptoms of a nervous kind. There was a considerable growth which led to crowding, often with local disturbances. Colic was rare, as also was interference with the lumen of the bowel. The course was long. The strength gave way only slowly. Taken as a whole the symptoms were not at all clear.

The patient was a woman, æt. 40, who had had two natural labours and one tubal pregnancy that had recovered spontaneously. Six years ago she had colicky pains in the upper part of the abdomen which seemed to indicate something wrong with stomach, the gall bladder, or the intestines. Later on vomiting took place without any colic. The liver was below its normal level. Further attacks of severe pain led to desire for an operation, but the speaker at the time declined to operate. Some months ago the pains were renewed with violence. During a period of observation of eight weeks there were observed: hyperacidity, normal urine, flatulence, depression of the liver and of the right kidney, enteroptosis especially of the transverse colon. During a journey at the new year she had the feeling of a rent in the right upper part of the abdomen, and after this she lost weight up to 10 lbs. The abdomen was distended, and the liver enlarged, no ascites, no œdema, Wassermann test negative. The diagnosis now lay between: hydrops of the gall bladder, syphilis affecting the liver, echinococcus, and finally a retroperitoneal tumour. Röntgen examination showed, stomach and small intestines pushed to the left, disappearance of the enteroptosis, no fluid passed into the small intestine through the ileocæcal valve. Per vaginam the tumour could be felt along with the uterus.

An exploratory operation showed a retroperitoneal fibrolipoma attached to the colon and the vena cava. The wound was now completely drained. Four weeks later an abscess opened, which appeared to come from an opening in the ascending colon. The patient's troubles were over for the present, and she had gained 13 lbs. in weight. The tumour, which did not show any malignant tendency, sprang from the fatty capsule at the upper pole of the right kidney.

Hr. Biernath related a case of

Bullet Wound of Lung and Kidney.

The patient was a young woman, æt. 22, who shot herself with a Browning revolver with suicidal intent. Two hours later she was admitted into hospital. There was no external bleeding. The entrance wound was in the third intercostal space three finger-breadths from the left margin of the sternum; no exit wound was visible. The next day the urine was bloody and there were appearances of peritoneal irritation. Cystoscopy, on the fourth day, showed that the blood in the urine came from the right kidney. A Röntgen photo taken with the ureter catheter in position showed a bullet in the lower pole of the kidney. On the 10th day the urine was purulent, and on the 16th there was a rigor. On the 17th day the kidney along with the missile was removed by Prof. Riese. The patient was discharged during the 7th week. At the middle of the kidney was a small opening, the size of a pfennig, which led into injured tissue about the hilus of the kidney. In the centre of the kidney was an infarct the size of a walnut. The different veins contained a yellow-coloured thrombus, in which cocci were included.

At the Verein f. Innere Medizin und Kinderheilkunde, Hr. Oberwarth related a case of

Spasm of the Pylorus in an Infant.

The child was but eight weeks old. Peristaltic movements were present, but the food stagnated in the stomach; also the child was losing flesh. The speaker said he had seen on the whole twenty similar cases, and he had seen a more favourable termination to the affection than had generally been ascribed to it. The treatment consisted in giving only the smallest quantity of human milk out of a bottle at one time, and in the intervals enemata of milk and saline. He did not wash out the stomach except in cases in which food stagnated in it or when the appetite had quite been lost.

AUSTRIA.

Vienna, Dec. 6th, 1913.

The discussion of Dr. Falta's communication on the

Theory and Treatment of Diabetes Mellitus

was resumed at the recent meeting of K.k. Gesellschaft der Aerzte. Dr. O. Kolischer recalled the publication of a theory of diabetes by himself fifteen years ago, of which the following were the principal features:—The normal continuous process of the splitting off of sugar from the protoplasm of the tissues, and from highly complex molecular systems, appears to be intensified in diabetes, either by nervous influence or from the presence of some toxic element. Accordingly, it is in this regard that we must speak of an over-production of sugar in the system. The amount of nitrogen excreted in the urine is, however, by no means a reliable measure of the sugar derived from albuminous sources, as retention of the nitrogenous residue may take place, which, in a diabetic organism, must be sooner reduced to carbon than to nitrogen. This splitting off of sugar in the organism takes place in the stimulation of every cell, and especially during that of the process of nutrition. But as we know that albumin is the aliment which furnishes the most powerful nutritive stimulus, so is it also of all nutritive materials introduced into the diabetic system that which elicits the most copious separation of sugar. The results which had obtained in clinical experiments on diabetic cases, by diminishing the supply of albumin, quite harmonised with this view. The experience of many years, too, of the effects of a vegetable diet went to show that there was a considerable difference in the proportional separation of sugar in the respective cases of animal and vegetable albumin. On this account he had already warmly advocated the use of a vegetable diet in diabetes. Another influence of great effect in the treatment of diabetes was furnished by our knowledge of the effects of a general lowering of the nutritive process. In concluding, Dr. Kolischer pointed to the analogy between his own system of diabetic therapeusis and that of the new era now ushered in by Dr. Falta. Its features could be arranged under four headings—(1) The individualising treatment had, as before, to be determined by the proportional degree of tolerance of each diabetic patient for carbohydrates, and, still more especially, by the nutritional necessities of the organism, especially as regards the minimum of nutriment with which the patient could be maintained. The nutritional demand should be gradually lowered as far as possible. (2) As the degree of tolerance for carbohydrates largely depends on the composition of the additional diet given with them, aliments should always be chosen in which the maximum proportion is of quality compatible with carbohydrate foods. With this prescription is included the device of furnishing the very smallest necessary quantity of albuminous material. (3) A vegetable diet, with the necessary selection, is specially suitable to diabetics, as it contrasts with every other form of alimentation by offering the maximum proportion of carbohydrates with the minimum of albumin and the minimum of calories. (4) The administration of fatty foods should be regulated solely by the nutritional demand in each case.

Dr. O. Porges pointed out that the question of the ætiology of diabetes had not yet been solved. While, according to one view, diabetes was merely an exaggeration of the normal process of sugar production in the organism, in the absence of the sufficient influence which normally controls the physiological formation of sugar, the other conception of diabetes is that of a deranged sugar oxidation, on account of which sugar accumulates in the blood, but which cannot, as in the normal condition, lead to deposition of glycogen, as "the sugar-hungry hepatic cells are continually sending out signals for the new formation of sugar." This theory also necessitates the assumption that the cells which are already swimming in sugar at the same time determine the continuous formation and conveyance thereunto of fresh quantities of sugar. What then does experimental research on metabolism prove in connection with either of these theories? While gastric or intravenous introduction or sugar determines an increase of the respiratory quotient in the normal individual, this is not the case with the diabetic. The normal individual converts the sugar to good account, as Dr. Falta expressed it: the diabetic did not. Now, in what does each conversion consist? Is the process most nearly one of combustion? The increase of the respiratory quotient speaks in favour of this view. So is the conception of Dr. Porges, who believes that the "conversion" consists in the deposition as glycogen in the liver. This view is corroborated by the fact that, in glycogen-free animals the hepatic glycogen is demonstrably replaced on the introduction of sugar, even when this is by intravenous injection. Accumulation of hepatic glycogen also results from oxidation of albumin and fat in the liver—hence an increase of the respiratory quotient. In diabetes there was no formation of glycogen in the liver after the ingestion of sugar, as many researches go to prove; inasmuch as, if the oxidation of albumin and fat in the liver is not stayed the respiratory quotient remains unaltered. This view also receives powerful support from numerous researches carried out recently in the Emden laboratory at Frankfort. Emden has shown, in company with a number of fellow-workers, that the still vital, bloodless liver oxidises fatty and formic acids, with formation of characteristic intermediate products—acetone bodies, among others. It is interesting to note that only the glycogen-free liver, or one poor in glycogen, effects this oxidation, not a liver rich in glycogen. It was also decisively proved by test-tube research in the laboratory that the supply of albumin and fat regulates the amount of the hepatic glycogen. Muscular tissue deprived of blood by the same *technique* showed no recognisable derivatives of the oxidation of derivatives of albumin or fat.

Dr. Porges then went on to point out that theories have recently been advocated with an object of reconciling the opposed views. It has, indeed, been admitted that the production of glycogen was diminished in diabetes, and this deficiency has been made responsible for the defective combustion of sugar. It has been said that the sugar-consuming organs (muscles) must first have the sugar deposited as glycogen before they can consume it; then, as the deposition of glycogen in the muscles is impaired, the sugar is not consumed. This view is not, however, sustainable in the presence of many well-attested clinical facts. Then, again, the formation of muscle glycogen is not impaired in diabetes; on the contrary, it is often found—as was first shown by research work in the Starling Institute—that the glycogen of the cardiac muscle is increased, while there is also a deposition of glycogen in organs previously glycogen-free. Diabetes is thus a result of defective glycogenesis in the liver, which in the altered conditions forms the sugar directly from albumin and fat. With regard to the practical therapeusis, oatmeal and flour were relatively easily "converted" in the normal way, and he thought that this fact threw some light on the much-discussed problems of diabetes. Meal and flour foods were, according to many authorities, normally converted by diabetics only in such preparations as porridge, custard, etc.; not in form of bread. But in these forms of cooking there are large proportions of fatty matter added to the carbohydrates, and this suggests the possibility that simultaneous provision of fat makes that of the carbohydrate more easy. He thought that as the fat was longer retained in the stomach, inundation of the intestine with starch, which was so readily converted into sugar, was thereby retarded.

UNITED STATES OF AMERICA.

New York, Dec. 1st, 1913.

THE CLINICAL CONGRESS OF SURGEONS.

The fourth annual meeting of the Clinical Congress of Surgeons of North America was held in Orchestra Hall, Chicago, from Monday, November 10th to Saturday, November 15th, under the presidency of Dr. George Emerson Brewer, of New York. As the name implies these meetings are pre-eminently clinical and, from this standpoint, the meeting just over in Chicago compared favourably with that of the previous year in New York. Both Chicago and New York contain a vast wealth of material, for than these two cities there are no other centres of population that have within their bounds a more cosmopolitan population. In fact, there are no cities which have so large a number of people drawn from all quarters of the globe. In addition to this wealth of material, the hospitals and institutions for the sick are plentiful and extremely well equipped in these cities. Last year New York easily surpassed anything ever before attempted from the clinical standpoint, and while comparisons would be invidious, it may be said that Chicago well upheld her great reputation at a surgical centre and that the clinics and the meetings at which papers were read passed off without a hitch.

Among the British guests were Sir Rickman Godlee, President of the Royal College of Surgeons of England, who came over to take part in the convocation exercises of the newly-founded American College of Surgeons and to read a message from the Council of the London Royal College. In this message felicitations were tendered to the American medical profession, and the hope expressed that the College would grow and prosper, and that by its influence the ideals and standards of surgery in America would be advanced and maintained on a high plane. There were also present Sir William Arbuthnot Lane and Mr. Herbert J. Paterson, of London. The meeting was well attended, there being in the neighbourhood of 4,000 members at the opening session.

Dr. E. W. Andrews, Chairman of the Committee of Arrangements, welcomed the members, and then introduced Sir Rickman Godlee, who said that he had been impressed with the enormous amount of clinical material which he had seen at all the hospitals he had visited and had been greatly struck with the methodical way in which instruction was carried on at these institutions. After congratulatory remarks by Dr. Murray McLaren, president of the Canadian Medical Association, and by Professor Krönig and Dr. C. J. Gauss, of Frieburg, Dr. George E. Emerson delivered the presidential address, this being a preliminary report on a

Simple and Rapid Method of Pyloric Closure in Gastro-enterostomy.

Dr. Brewer reviewed the various methods which had been suggested in the past, and emphasised the fact that the present desideratum was for a method which could be as quickly and simply executed as a simple ligature, and at the same time be as permanent in its results as the prolonged operation of Von Eiselberg. Dr. Brewer said that his method consisted in constriction of the pylorus by an aluminium band, which was easily passed round the tube at the point, and quickly rolled with the fingers into an unyielding ring with sufficient compression to obliterate the lumen of the tube, but not to compromise the vitality of the compressed tissues. Experiments upon dogs had shown that this method of closure produced a complete occlusion of the pylorus, as proved by the fact that water would not pass the constricted point where the stomach was distended, and also by the fact that sections through the pylorus and aluminium ring showed by gross and microscopic examination, not only that the pylorus was closed, but that the vitality of the tissues was not impaired. Another series of experiments showed that the same method could be applied to the pyloric antrum, and also that the pylorus which had been closed for some months could have its function again restored by a second laparotomy and removal of the aluminum band. While Dr. Brewer had not employed this method on the human subject the animal experiments had been so conclusive, that he believed it to be the the simplest and safest method yet proposed for these cases.

On Tuesday, Nov. 11th, Dr. John B. Deaver, of Philadelphia, read a paper on

Gastric Hœmorrhage,

in which he said that such hæmorrhage due to malignant disease of the stomach was not commonly profuse and sudden. The hæmorrhage from malignant ulceration, as a rule, was a slow seepage which gave rise to little systemic effect of bleeding, but revealed itself by the process of coffee-ground vomitus or melæna. Sudden hæmorrhage was one of the modes of termination of gastric carcinoma, but in all but the rarest instances such an event was but the termination of an ulcerated myoma of the stomach. Operation might be indicated in gastric carcinoma when hæmorrhage chanced to be an early symptom and there was still hope of cure ; or it might be indicated in advanced or otherwise inoperable cancer when hæmorrhage was so profuse and persistent as to shorten even the period of prognosis given to cancer. In this case the measures to be adopted were excision, gastro-enterostomy or jejunostomy, in accordance with the pathology found at operation. But four most essential points remained to be settled : (1) The recognition of suitable cases ; (2) the time to operate ; (3) the type of operation to be performed ; (4) the proof of our position by mortality statistics.

Dr. A. J. Oschner, of Chicago, said that gastric hæmorrhage must not be regarded primarily as a surgical emergency. An idea which had permeated the surgical conscience as a result of the surgical possibilities of the past few decades had given rise to the feeling that when any very serious condition occurred it must be attacked surgically. This was true only when the good judgment of the surgeon indicated that the patient was in such a condition that surgical treatment would give the greatest possibility of cure. A careful and accurate diagnosis was the foundation for this judgment based upon a thorough knowedge of the history of such cases. The actual deathrate from chronic hæmorrhages of the stomach was undoubtedly large, and must be considered from the standpoint of ulcer of the stomach, and that treatment must again be based upon a diagnosis which now could be made with a great degree of certainty.

Mr. Herbert J. Paterson, of London, dealt with the operation of

Gastro-jejunostomy,

and the principles which should determine its use. He said, in part, that for a good many years he had been advocating the view that gastro-jejunostomy was a physiological one. Sir Berkeley Moynihan had expressed his belief that the "physiological explanation of gastro-jejunostomy is rot."

Mr. Paterson gave the reasons for his belief at considerable length, the main reason being that after a gastro-jejunostomy there was a constant increase of the mineral chlorides of the gastric juice. The increase must be due to chlorides added to the gastric juice by the entrance of bile and pancreatic juice, because (1) the total chlorides of the gastric contents were diminished ; (2) undoing gastro-jejunostomy diminished once more the amount of mineral chlorides ; (3) if an entero-anastomosis be performed the increase of the mineral chlorides did not occur ; (4) in cases in which there was a marked excess of mineral chlorides ; (5) as a rule, the increase of mineral chlorides did not follow operations other than gastro-jejunostomy. Doubtless part of this increase was due to the neutralisation of free hydrochloric acid, and the consequent formation of sodium chloride. This did not affect the argument, because (1) the neutralisation must be caused by the carbonates of the bile and pancreatic juice ; (2) if before gastro-jejunostomy, free hydrochloric acid be absent from the gastric contents, there was still an increase of the mineral chlorides after gastro-jejunostomy. The four practical lessons to be learned were : (1) that the type of gastro-jejunostomy employed is of less importance than the manner in which it is performed ; (2) that if gastro-jejunostomy be a physiological operation its use for the treatment of gastric hæmorrhage is correct and explicable ; (3) that occlusion of the pylorus is an unnecessary complication of gastro-jejunostomy and is based on erroneous pathology ; (4) that if gastro-jejunostomy be a physiological operation then it is as efficient a treatment for ulcers of the body of the stomach as for ulcers near the pylorus ; in other words, gastro-jejunostomy is preferable to excision.

Dr. Carl Beck, of Chicago, in discussing Mr. Paterson's paper, remarked that as to whether pyloric exclusion was practically useless, further experimentation in the workshops of surgeons would determine. At present surgeons could only take the say-so of Mr. Paterson for it.

(*To be continued*).

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

EDINBURGH.

Indian Students in Edinburgh.

The announcement by the India Office that an inquiry is to be held by a sub-committee of the London Advisory Committee into alleged grievances of Indian students has been received with some interest in Edinburgh, on account of the number of Indians who now attend the university. It is estimated that there are between 1,600 and 1,700 Indians studying in the United Kingdom, of whom more than 700 are members of the Inns of Court, while more than 300 are in Edinburgh and Glasgow. The sole object of the Indian student department is to help students to obtain the facilities they require, and to obviate difficulties they may meet. Most of the students do credit to their training here, but as their numbers increase the competition for appointment and opportunities for training increases also, and so, it is to be feared, does prejudice increase as well. The department exercises a certain amount of financial guardianship over some students, and has appointed local advisers in different centres. Dr. James Miller is the local adviser in Edinburgh. In the report of the department, the question of race prejudice is touched upon, and it is remarked that signs of this prejudice have been shown by certain Edinburgh students, chiefly those who, like the Indians, are British subjects and visitors from overseas. Prejudice of this kind, says the report, so far as it is conscious and deliberate, is happily not widespread. It is found in only a few young men who do not understand what the British Empire stands for, or what the obligation of good manners means. There is, unfortunately, no doubt that what the report states is correct. At present there can be no question that a certain amount of scarcely veiled prejudice against native students exists in Edinburgh. There are two main reasons for this state of things: first, the increase in the numbers of the Indian students, and, secondly, the greater prevalence of colonial opinion in the University. Twenty or more years ago, when Indian students were much less numerous, they were received by their fellows on a much more equal footing, and the change that has taken place is regretted by many who have witnessed it. There is, however, no use blinking the fact that we have in the University the colour problem, though on a small scale. It is as useless to urge that the traditions, mode of life, and religion of the East do not form a bar to intimate social intercourse with the West as it is to urge that the colonial prejudice against the coloured races is unjust and unfounded. Both these facts exist. Intimate relationship is as matters stand impossible, and racial prejudices strong. But surely courtesy demands that these differences shall be minimised, not exaggerated, and that in undergraduate university life tolerance be extended all round. Those who are most interested in Indian affairs cannot but regret the impression of England which many of our fellow subjects take home with them. We would gladly see the day come when the necessity for educating Indians in this country becomes less. The only permanent means of avoiding friction of a very undesirable kind would be, it seems to us, to foster higher university education in India, so that, unless in exceptional cases, the Indian student need not come to one of our own universities.

National Medical Union.

This new association has received a number of recruits from Edinburgh. The Medical Guild, which consists of non-panel practitioners, has become one of the Federated Societies, and Professor Russell, Edinburgh, has been elected one of the Presidents of the National Medical Union. Opinion is divided among the members of the Guild as to the advisability of remaining attached to the British Medical Association, or resigning, and a considerable number of men who are not on the panel have resigned already. The decision of the Association to raise the subscription to two guineas will in all probability act as the proverbial last straw, and decide a good many waverers or merely indifferent members to withdraw. After all, to a great many doctors the chief advantage of belonging to the Association has been the *Journal*, and no doubt many will feel indisposed to pay a larger subscription for what seem to them very doubtful benefits when they can obtain the *Journal*, or one of the other weeklies, at the old rate through the ordinary channels of distribution.

Insured Persons in the Royal Infirmary, Edinburgh.

A conference between the managers of the Infirmary and delegates from local approved societies and Insurance Committees was held in the Infirmary on December 5th, at which the managers pointed out their attitude towards insured persons, explaining that in only a small number of cases, such as was clearly within the competence of panel doctors, had insured persons been referred to their own doctors after applying to the Infirmary. They also pointed out that during the half-year to July 14th, 1913, 2,540 insured persons had been admitted and treated, at a cost of £10,946, and on that score they claimed decided and substantial financial support from approved societies. The appeal was not made in the form of diminishing subscriptions, but on grounds of justice. After some discussion, for the most part favourable, a resolution was agreed to to the effect that while the societies were not committed in any way the representatives agreed to recommend all the societies to take the needs of this hospital into favourable consideration.

Highlands and Islands Medical Service Board.

The King has been pleased to appoint Norman Purvis Walker, M.D., Treasurer of the Royal College of Physicians, Edinburgh, to be an additional member of the Highlands and Islands (Medical Service) Board.

GLASGOW.

The Victoria Infirmary, Glasgow.

The annual report of this Institution has just been published. Like that of the Western Infirmary, it shows a large deficit in the ordinary income as compared with the expenditure, but in this case again, the extraordinary income, consisting of legacies, donations, etc., makes up for the deficiency in the ordinary income, and it also allows the governors to add to capital the handsome sum of £9,429 16s. 4d. The daily average number of patients in the Infirmary during the year was 253. At the Infirmary dispensary for outdoor patients, 3,380 individual cases were dealt with, involving 11,294 consultations. The corresponding numbers for the previous year were 4,591 and 15,262. This reduction in the number of cases treated at the dispensary has been caused, it is stated, by the National Health Insurance Act, whereby patients are now treated by their panel doctors. As in the case of the Western Infirmary, the employees' subscriptions show an increase, notwithstanding the Insurance Act. Of the cases treated to a conclusion in the wards, 317 or a percentage of 9.02 died. Deducting, however, 78 cases which were of such a serious nature that the patients died within 48 hours after admission, the death-rate is reduced to 7.00. There were no vacant beds at any time during the year, and generally there were from 160 to 200 patients waiting for admission.

The Risks of General Practice.

The risks to which the profession is exposed are again exemplified in an action which has been raised in the Court of Session. A lady sues a Lanarkshire practitioner for £500 as damages. She states that on June 5th, while pruning in her garden, she cut the little finger of her left hand very deeply. She washed and dressed the wound, but as it was very painful next day she sent for the defender, who diagnosed that the finger was poisoned through some garden matter having got into the wound. The pain and swelling, she says, increased in spite of the defender's treatment, and on June 23rd she went to Glasgow and consulted another doctor, who amputated the finger. The pursuer complains that the loss of the finger was occasioned by the defender's treatment of it. The defender denies that he was guilty of fault or negligence, and he states that he was most careful in his attention to the pursuer's wound and exhibited no lack of skill in his treatment. The defender is a practitioner of 21 years' standing.

Maternity Benefit.

An interesting lecture was delivered on the 3rd inst. on this subject at a meeting in the Council Room of the Charity Organisation Society, by Dr. Sutherland, who is Assistant Medical Officer of Health. She stated that since maternity benefit came into operation, a marked difference had resulted in the manner in which notification of births was made. This was shown by a decrease of notifications through the Maternity Hospital and by an increase in notifications by general practitioners in private practice and by midwives. Inquiry by the Public Health Authority which had been made into 2,552 cases of births notified, showed that the insurance benefit was received in 2,145 of these; in 214 cases it was found impossible to obtain information; in 56 cases one of the parents was insured, although no benefit was received; while in 137 cases neither parent was insured.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

LONDON HOSPITAL APPOINTMENTS.

To the Editor of The Medical Press and Circular.

Sir,—While I have no desire to question the opinion expressed in your leading article of the 3rd inst. to the effect that "it would be of the greatest possible ultimate value to the public, as well as to the cause of medical science and to the patients, were an adequate salary to be attached to all hospital posts," exception must be taken, I am afraid, to certain of your arguments.

You write that "the philanthropists who administer the affairs of the charity are rewarded by social prominence and in some instances by titular distinction," and that "it may be said generally of hospitals that everyone is paid directly or indirectly for services rendered, except the members of the honorary staff upon whom falls the heat and burden of the day."

Such reasoning is to my mind, however, absolutely futile, for is it not a fact that your previous remark is likewise true in the case of consultants, medical and surgical, who moreover owe the practice they enjoy to the professional reputation they acquire in the hospitals at which they hold or have held appointments?

Could you point to unattached consultants who, notwithstanding, have acquired practices equally large, and who by virtue of their professional pre-eminence have attained to titular distinction, it might be a different matter.

I am, Sir, yours truly,
Justitia.

London, December 5th, 1913.

REDISCOVERY OF A SYPHILIS SPECIFIC.

To the Editor of The Medical Press and Circular.

Sir,—We are now told that "Antileutin," the new remedy for syphilis, may dethrone salvarsan (an arsenical compound). We are also told by Tsuzuki that the best results are obtained when it is combined with iodides and mercury.

What is antileutin, anyhow? A simple compound of antimony oxide. But for years our forefathers treated syphilis with Plummer's pill—antimony, calomel, and guaiacum, whilst cases resistent to this process were treated with Donovan's solution—arsenic, iodides, and mercury.

I think Wallace, of Dublin, when surgeon to Jarvis Street Hospital, advocated this line of therapeusis.

I am, Sir, yours truly,
J. C. McWalter.

Dublin, December 4th, 1913

THE ALCOHOL QUESTION.

To the Editor of The Medical Press and Circular.

Sir,—In a few pithy and wise sentences, Dr. Robert Lee in a recent letter to your paper indicates the real crux of the alcohol question. Alcohol is a poison; so are tobacco, tea, and cayenne pepper; so also are mutton chops and muffins—when taken to excess. Many of our most useful drugs are deadly poisons—as, for example, arsenic, strychnine, belladonna. Alcohol is a poison; but consumed in small doses and under certain conditions it passes through the system without giving rise to any injury recognisable to minute scientific examination. On the contrary, its stimulating effects render it in suitable cases an extremely valuable therapeutical agent. It is unfortunate that this fundamental fact is not acknowledged and acted upon by all those who devote themselves to what is called "temperance" work. An immense amount of harm is still being done by fanatical propaganda in this direction. Fanatics often talk as though all consumers of alcohol are inebriates, in the habit of constantly imbibing doses of crude spirit for the pleasure of the more or less complete intoxication thus produced. They ignore the difference between raw spirits and wholesome beer or fine light matured wine free from excess of added alcohol. In spite of some setting back, in which at present, and it is to be hoped only temporarily, the alcoholic quack medicines now so widely advertised are very active, we are evolving a more temperate society. Among all and every class drunkenness is nowadays looked upon with more or less disgust and loathing. A hundred years ago most gentlemen habitually got drunk at the dinner table. Herbert Spencer somewhere points out that a savage tribe when it gave up torturing, killing, cooking and eating its prisoners of war, and kept them only as slaves, displayed a real advance in civilisation. If all our people can be gradually brought to the position of our at present most refined classes, if they can be brought to appreciate what is elegant instead of what is coarse in alcoholic beverages, to prefer a clean, fine flavoured beer of the lager type to the loaded liquor which a brutal palate demands, we shall have perhaps attained as near to the millenium in this connection as mankind in its present inferior stage of ethical development is capable of reaching.

I am, Sir, yours truly,
Medical Temperance Reformer.

December 6th, 1913.

OBITUARY.

DEPUTY INSPECTOR-GENERAL T. J. PRESTON, R.N.

We regret to announce the death of Mr. Theodore Julian Preston, Deputy Inspector-General of the Royal Navy, which has taken place at his residence, 16, St. John's Park, Blackheath, aged 66. The deceased, who was the son of the late Dr. W. J. Preston, received his medical training at St. Mary's Hospital, and after qualifying as M.R.C.S. in 1870 and L.R.C.P. in 1872, he held surgical appointments at Brighton and Hove Lying-in Hospital and East Grinstead General Dispensary. He entered the Navy as a surgeon in 1873, and was promoted to the rank of staff surgeon in 1885, and to that of fleet surgeon in 1894. He was surgeon of H.M.S. *Sultan* at the bombardment of Alexandria in 1882, and during the Egyptian War. After the former action he landed in medical charge of the Royal

Marines, and was also employed on shore as senior medical officer of the Royal Marine Battalion. He became attached to Sir Evelyn Wood's Brigade for the defence of Alexandria and was present at the capitulation and surrender of the Aboukir and Rosetta Forts, and received the Egyptian medal, the Alexandria Clasp, and the Khedive's Bronze Star In 1888 he was awarded the Sir Gilbert Blane Gold Medal for "skill, diligence, humanity, and learning in the exercise of his professional duties" in the Navy. He retired from the Navy Medical Service in 1902 with the honorary rank of Deputy Inspector-General of Hospitals and Fleets.

SPECIAL REPORTS.

THE RESEARCH DEFENCE SOCIETY (NOTTINGHAM BRANCH).

THE annual meeting of the above society was held at the Medical Club, Nottingham, on December 1st, 1913.

The following address was delivered by Bishop Frodsham, who occupied the chair:—

The triumphs of medical research have had such general and far-reaching effects in England that it is difficult for the majority of people to realise what England would be without them. Medical men are able to assess what medical science has wrought in little more than a generation. Ordinary people like myself find it requires an effort of imagination to realise the changed state of affairs. In one respect I have an advantage over many in England. For ten or twelve years I have wandered to and fro in a huge tropical land where medical research was practically unknown. I was brought face to face with diseases, some new and others old, all of which were imperfectly understood. Do not go away with the idea that tropical Australia is a peculiarly unhealthy place. It is nothing of the sort. There are certain facts connected with the atmosphere, and with the huge sea areas of the Southern Hemisphere, which make even the tropical parts of Australia phenomenally healthy. But as in all tropics, there are diseases peculiar to those parts against which white people have not become, as they have in their own milieu, partially immune.

There are certain diseases in tropical Australia, the names of which are unfamiliar, perhaps meaningless, to the vast majority of English people. Epidemic dysentery, dengué fever, ankylostomiasis, beri-beri, sprue, filariasis. Some of these diseases are well known to science, and their remedies have been found through scientific research in the Empire, in Manila, and in Japan. Others are still very obscure. Others again are easily diagnosed, but the remedy has not yet been found. Take, for instance, filariasis. It affects animals as well as men, and in some districts to the extent of perhaps 10 per cent. of the population. But although the disease is so easily recognised, in both cause and effect, its remedy, I believe I am right in saying, is still unknown. This is a case where the need for greater scientific knowledge becomes imperative. Very late one night, when the steamer I happened to be travelling upon was unloading at a certain tropical port, a man came to my cabin, and woke me up to tell me that he was suffering from such a horrible form of filariasis that he thought he dare not continue to live. The unspeakable misery on the man's face, as he sat by my side, and we talked of the possibility of a remedy being found, set me very steadfastly on a task I was at the time feeling excessively irksome, the formation of the institute for the study of tropical diseases in Australia. That institute has been founded at last, and I regard my own modest effort in its foundation as one of the best things I have done in my life. It is already helping, and will help yet more, to lay the horrible spectre of unknown diseases from the lives of English men and women who are building a home for the white race in that part of the Empire.

I have told you all this because I want to make it quite plain that in assisting in the formation of this institute for the study of tropical diseases I knew, as all Australians knew, that it would entail to a certain extent experiments upon living animals. The experiments, as everywhere else, would be principally by inoculation—but still they would be experiments. Their result will be found in the future. But consider the triumphs of past research by which you are safeguarded at present. The method was the same. The knowledge of antiseptics, anæsthetics, of antitoxins, of all the thousand and one remedies that have relieved human and animal suffering, has been gained by experiments upon animals. At certain stages of research the scientists have paid the price of knowledge in their own lives. This was the case of those brave American medical students who submitted to voluntary inoculation of yellow fever to discover how long the Stegomyia mosquito could be the host of the disease. It would be unthinkable that any could doubt the heroism, the sincerity of such men. But the same spirit is in the hearts and lives of others who are often bespattered with contumely and lifted up to abuse. I ask you to believe that it is not an incredible thing that medical scientists have been moved throughout by a sincere desire to make the aching hours of pain less long, or less hopeless, to suffering men and women whom they may never know. I ask you to believe of some at least that they have done so as an act of service to One who said of the sick "Inasmuch as ye did it unto one of the least of these my brethren ye did it unto Me."

The Research Defence Society is not a society of scientific experimenters. I stand halfway between the few scientific men who conduct the experiments and the many who simply want to see fair play. Am I right in saying for you that much as we value research, and believe it to be morally justifiable, we do not oppose restrictions and regulations which aim, not at hampering all research, but at reducing the danger of any animal suffering unnecessarily? We are opposed to allowing judgment to go by default against those whom it is the fashion in certain quarters to dub "vivisectors." We are anxious to publish the whole truth, and we believe that truth is great and will in the end prevail. No member of this society would denounce all opponents of experiments on animals even though he might regard them as often "grievously misinformed and overweighted by sentiment." But the whole temper of British people is at the bottom opposed to fanaticism and prejudice, and it is against the fanatic and the prejudiced man that this society is in arms. Like Cardinal Newman, I am inclined to think that prejudice corrupts the soul "beyond those sins which are called deadly." It is associated with such an astonishing want of mere natural charity. It possesses such an unaccountable readiness to believe evil of others. And from prejudice, fanaticism, and all uncharitableness Good Lord deliver us.

ROYAL COMMISSION ON VENEREAL DISEASES.

ON the 1st instant, Dr. Burnett Ham, who from 1909 until this year was head of the Health Department in the State of Victoria, described the measures which have recently been taken in connection with venereal diseases in that State. In 1908 the Australian Medical Congress passed the following resolution: "That syphilis is responsible for an enormous amount of damage to mankind, and that preventive and remedial measures directed against it are worthy of the utmost consideration." Later a deputation waited upon the Premier of Victoria in 1909 to urge the consideration of this matter, and Dr. Ham was directed to draw up a scheme for its investigation, and an advisory committee consisting of leading medical men and women in Melbourne was appointed to act with him.

As a first step to ascertain the facts as precisely as possible it was decided to make syphilis a compulsorily notifiable disease in the Melbourne Metropolitan area. In actual practice the compulsory nature of the notification was not insisted upon as no penalties for failure to notify were enforced, but it was felt that unless an official flavour was given to the requirement to notify the response from the medical practitioners would be but small. There was at first some opposition on the part of the medical profession to the proposed notification, but this was to some extent removed when it was made clear that the notification was to be impersonal, that no names were to be given, and that consequently no administrative action could be taken on the notification so far as the patient was concerned.

As a matter of fact, during the year in which the notification order was in force only 110 out of the 350 to 400 practitioners in the metropolitan area actually notified cases. Thus the measure adopted was not compulsory notification as ordinarily understood, but rather an experiment made with a view to ascertaining the amount of syphilis in the city. In connection with the notification arrangements a circular was issued to medical practitioners explaining the kind of cases they were expected to notify, and the doctors were also asked to supply with each notification a sample of the patient's blood for the purpose of testing by the Wassermann reaction.

In the course of a year, 5,500 notifications were made and an equal number of samples of blood submitted; 3,500 of these notifications were made by private practitioners, 900 by the Melbourne Hospital, and 1,100 by the Eye and Ear Hospital. Of the 5,500 Wassermann tests for syphilis which were carried out 1,900 gave positive and 400 partial reactions, and it was calculated that this corresponded to a number of syphilitic cases equivalent to 0.5 per cent. of the population of the area. This figure was very much lower than had been anticipated.

An investigation was also carried on at the eye and ear clinics of Dr. Barrett. All patients presenting themselves during a certain period, irrespective of the disease from which they were suffering, were tested by the Wassermann reaction. The results showed that out of 550 cases 75, or 13.6 per cent., gave positive or partial reactions. With regard to gonorrhœa, a statement was furnished to the Advisory Committee by the Women's Hospital, from which it appeared that in the view of the staff at least 50 per cent. of the major operations performed at the Hospital were due to gonorrhœa.

The Advisory Committee, after submitting their report to the Government, endeavoured to induce the Press to take up the question, and in this they met with a certain amount of success. The National Council of Women were also approached, and they agreed to assist in an educational campaign and to co-operate with any reasonable measures the Government might bring in, provided that there was no legislation on the lines of the Contagious Diseases Acts and that no difference was made as between men and women. The Advisory Committee did not recommend legislation, but they advised the Government to subsidise the provision of wards for the reception of venereal cases in the general hospitals. This recommendation was adopted by the Government and free beds were provided, 24 for males at the Alfred Hospital, and 20 for females at the Women's Hospital. The wards were equipped by the Government with the most modern appliances, and in addition a subsidy was made to the Melbourne University to provide for the carrying out of Wassermann tests.

At first there was some difficulty in filling the beds provided, but as it became known that the treatment was in a general ward, and that the patients would not be dealt with differently from those in the other wards, a good demand for beds arose. The establishment of a night clinic at the Alfred Hospital also helped to popularise the arrangements.

Dr. Ham thought that the experiments conducted at Melbourne had led to a greater interest in the subject, and that in securing early treatment and early diagnosis they had achieved an important result. A Health Bill was at the present time before the Victorian Legislature which contained provisions for adequate and gratuitous treatment of patients, for the prohibition of treatment by unqualified persons, and for making the transmission knowingly of venereal disease a penal offence.

REVIEWS OF BOOKS.

THE NERVOUS AND CHEMICAL REGULATORS OF METABOLISM. (*a*)

We have read these lectures with great pleasure and interest. They give a remarkably concise and satisfactory account of present knowledge regarding the functions of the ductless glands, and the author has done good service in arranging this knowledge in excellent perspective. He shows us that three factors are concerned in the co-ordination of the body. These are (1) hereditary inertia or inherited developmental tendencies, (2) the nervous system, and (3) the internal secretions.

The first factor is dominant in embryonic life, the two latter become more prominent as development advances. There are many striking ideas and suggestions throughout the book. We are told that administration of adrenalin by the mouth has no effect, and that subcutaneous injection *is said* to raise the pressure in man. We have little doubt that subcutaneous injection of adrenalin does raise the pressure in man, and it would surely be an easy matter for the author to investigate the point for himself. A note of caution is sounded regarding the effect of secretion on the pancreas, and it is suggested that the nerve control may yet be shown to have a greater importance than is attached to it at present. The condition of the thymus in *mors thymica* is thought to have nothing to do with the fatal issue, and the term may be considered a misnomer.

The symptoms of Addison's disease are attributed to disease of the cortical portion of the suprarenal gland, "for there is no evidence that adrenalin exercises any tonic effect on skeletal muscle."

We could have wished that the author had expended a little care on the presentment of his work—it is abundantly worthy of the best possible setting. Unfortunately little attention appears to have been paid to the matter. The book is throughout too condensed, and too much technical knowledge on the part of the reader is assumed. The author takes such terms as *metamere* and *petromyzon* in his stride, and is niggardly in the matter of explanations of any kind. The latter half of page 11 is downright bad English. The third paragraph on page 39 is ambiguous, and we are solemnly informed on page 159 that "*birds* . . . undergo a constant transition from the state of the apathetic eunuch to that of energetic *manhood*." We might add that the figures are marked with letters which in many cases are not referred to either in the legend or in the text.

For the intrinsic merits of the book we have nothing but praise.

SURGICAL TREATMENT. (*b*)

It is about fourteen years since the first edition of this work appeared, and immediately received a hearty welcome from the surgical profession. It is now presented in a revised form with ample additions and such changes as are necessary to bring it up to date. The authors have adhered to their original plan of not overloading the book with all the methods of treatment described or even in use, but have made a wise and careful selection of those methods which they have proved by practical experience to be the best. The work appeals to the practitioner rather than to the student, and should be found useful for frequent reference by the general practitioner as well as by the practising surgeon.

The first volume contains five divisions, which treat of (1) Inflammation and its Sequlæ; (2) Wounds and their Complications; (3) Syphilis and Tuberculosis;

(*a*) "The Nervous and Chemical Regulators of Metabolism." By D. Noël Paton, M.D., B.Sc., Professor of Physiology in the University of Glasgow. London: Macmillan and Co. 1913. Pp. 217. Price 6s. net.

(*b*) "A Manual of Surgical Treatment." By Sir W. Watson Cheyne and F. F. Burghard. New edition, entirely revised and largely re-written with the assistance of T. P. Legge and Arthur Edmunds. In 5 volumes. Vol. i., pp. 552, figs. 223; vol. ii., pp. 598, figs. 252, plates 4; vol. iii., pp. 603, figs. 271. London: Longmans, Green and Co. 1912. Price 21s. net each vol.

(4) Tumours; (5) Deformities. There is also an appendix which deals with anæsthetics, both local and general, and the examination of the blood in surgical conditions. We would suggest that enough emphasis is not laid on the use of iodine in the preparation of the skin of the patient for operation, and even more in the treatment of accident and dispensary work, in which the introduction of the use of iodine has brought about what is little short of a revolution within the last five years.

The second volume, in its three divisions, deals with:—(1) The Surgical Affections of the Soft Tissues; (2) Of the Bones; (3) Amputations. In the section on the arteries and aneurysms, arteriorrhaphy and Matas's reconstructive method of treatment are fully described. In the section on fractures the authors do not advise operation for all cases, but state that it is not justifiable to leave the patient with an ununited or badly united fracture, or even a recent fracture in bad position, if the fragments can be maintained in proper position by means of an operation, and while they are not prepared to discard splints entirely they are of opinion that massage and careful passive movement may be associated with them to a far greater extent than has hitherto been the case, not only without risk to the union, but with actual advantage to the patient.

The third volume corresponds to Volume IV. and part of Volume V. of the old edition. It deals with affections of:—(1) The Joints; (2) The Spine; (3) The Head and Face. It has been brought thoroughly up to date and adequately and carefully revised. Various operative measures for unreduced dislocations, fracture dislocations, and recurring dislocations are very fully described. Of tuberculous diseases of the joints the authors say that operations "are diminishing in number every year." The description of arthroplasty is very meagre and the illustrations are difficult to follow owing to the misplacing of the two lower figures on page 154. The section on the treatment of affections of the head and face has been modernised, and there is a particularly good chapter devoted to the treatment of trigeminal neuralgia. The illustrations throughout all three volumes are numerous and at the same time good, showing clearly what is intended. Though the surgeon may not agree with all that is said in this work, he will find on all questionable points that the authors are "able to give a reason for the faith that is in them."

HÆMOCYTES AND HÆMIC INFECTIONS. (*a*)

This remarkable volume presents many of the characteristics of the work of an enthusiastic pioneer; thoroughly trained and equipped—in the most up-to-date modern methods, and for the extension of the borders of the daily expanding scientific domain. The author modestly disclaims all pretension to "a complete treatise." From the personal view-point we are very glad; too many complete treatises have passed through our hands in the past, and very nauseating—and all too imperfectly pre-digested—mental pabulum we found tinned, and stamped, and trade-marked, between their orthodoxically respectable covers. The micro-photograms form the outstanding feature of the work, and we congratulate the author on their production. They "have been taken at a magnification which would clearly set forth the morphological characters of cells and parasites as seen in the blood in various phases of disease." The great enlargement inevitably takes away from the diagrammatic clearness of the æsthetic marginal outlines of the illustrations of the older text-books; but they also make us recall the view so forcibly expressed by Macaulay, that caricature is the most impressive method of conveying knowledge—in history especially. The prevailing doctrine of bacteriological and protozoan pathology is well represented here; and even the inquiring heretics who believe those agents to be grievously libelled by the current orthodox acceptation of such as *causa causans,* will surely derive profit and pleasure from a perusal of Dr. Burnham's volume.

SLEEPING SICKNESS. (*a*)

The contents of this booklet represent the essence of the up-to-date scientific expression of the experts' view of the nature of one of the strangest of clinical entities. Statistical data are given, so that the reader is supplied with at least the broadly outlined arrangement of facts. Effect and (attributed) cause do not, perhaps, dovetail so perfectly as the logician—and philanthropist—would like. Perhaps the most interesting section, for many readers, will be that which tells "How the Brigade wages War against the Glossina Palpalis." When the animal pests have been exterminated, and the drainage and hygiene brought into line with modern achievement, there will surely be better health in tropical zones. And the indictment, even if proved absolutely false, will hardly carry unpopularity of the prosecutor. Did not the immortal Koch drag in the crocodile? And dreadful things have been said of recent years about the sanitary influence of the rat, and the flea, and the (still more familiar) house-fly! And most of us believe that we would be better without those neighbours, and will sympathise little with them, even under unjust accusation and punishment.

FOOD AND FEEDING. (*b*)

It is less than three years since the first edition of this invaluable text-book saw the light, and now that a second has been called for the author has brought it well up to date by the inclusion of a good deal of fresh material. Commencing with an account of the physiology of the digestive processes and the metabolism of the foodstuffs, the reader is led by easy stages to the detailed consideration of every article of food in common use and its effects upon the body in health and disease. Vegetarians, or at any rate those who believe that health and vigour of body can be maintained upon a diet that excludes flesh foods, will derive some comfort from the statement on page 522 that "it is certainly possible now to frame an exclusive vegetarian *régime* containing an adequate amount of proteins, fats, carbohydrates and salts, in which there is no excess of bulk of vegetarian foodstuff." On page 531, however, the author summarises the whole question by stating that "it may be said that in healthy subjects, and more especially in young subjects under forty years of age, a lacto-vegetarian diet has no advantages over the more conventional mixed dietary, taken in equal moderation and submitted to the process of thorough mastication; in later life, however, in health it is a wise rule gradually to more and more restrict the rich animal protein foods, and approximate to a lacto-vegetarian *régime.*" The term "alimentary toxæmia," nowadays so much boomed, does not find a place in the book, though reference is made in several chapters to the deleterious effects upon various systems of the body of poisons "absorbed from the alimentary canal." Intestinal auto-intoxication has a section all to itself (page 346).

Forced feeding (not "forcible") is described as being resorted to "in asylum practice and in certain medical affections of the tongue, pharynx and œsophagus which render deglutition impossible." The merits and composition of many so-called proprietary foods and beverages are freely discussed, as well as the circumstances in which they may be found useful. The practitioner will derive the greatest help from the

---

(*a*) "Hæmocytes and Hæmic Infections: A Handbook for Students and Practitioners." By Frederick W. E. Burnham M.D., C.M. With 226 microphotograms by the author. London: H. K. Lewis. 1913.

(*a*) "Sleeping Sickness in the Island of Principe: Sanitation, Statistics, Hospital Services and work of Official Conservancy Brigade." By Surgeon-Captain Bernardo F. Bruto da Costa Health Officer and Chief of the Sleeping Sickness Commission. Translated by Lieut-Colonel J. A. Wyllie, F.R.G.S., Indian Army (retired), Hon. Associate, Centro Colonial, Lisbon. Published for the Centro Colonial, Lisbon, by Baillière, Tindall and Cox, London. 1913.

(*b*) "Food and Feeding in Health and Disease." A Manual of Practical Dietetics. By Chalmers Watson, M.D F.R.C.P.E., Assistant Physician, Royal Infirmary, Edinburgh. Second edition, revised. Pp. xvi., 638. Oliver and Boyd: Edinburgh and London. 1913. Price 10s. 6d. net.

chapters upon the appropriate diet suitable for diseases of every organ and system of the body. Many excellent menus are given, while the directions given for making various articles for invalids are readily followed. In fact, Dr. Chalmers' book is a valuable one for cooks and nurses, and everyone who has anything to do with the sick should read Chapter XIII. on "The General Serving of Food for Invalids." A full account is given of the diet suitable for all stages of tuberculosis, and the specimen dietaries for patients at both extremes of the social scale are all that can be desired. An interesting section of the book is devoted to "Special Diet Cures," these comprising purin-free diets, Salisbury, milk and whey, and sour milk treatments. The Banting and Oertel systems are described in connection with obesity.

In the appendix, which occupies some sixty pages, will be found a valuable series of original papers by the author and other collaborators upon the influence of meat diet upon growth, the thyroid gland, the kidneys, and other organs. There is an unusually full index. After a careful examination of Dr. Chalmers' text-book we have no hesitation in pronouncing it to be the best of its kind in the language.

LITERARY NOTES.

Some useful therapeutic hints are to be found in No. 11 of *Riedel-Archiv*, a monthly supplement to the well-known "Riedels-Berichten"—"Riedel's Mentor," already noticed in our columns. Many of the preparations of the house of the J. D. Riedel Co., familiar to practitioners, such as gonosan, salipyrin, and neu-Bornyval, are the subject of interesting articles, and a capital photogravure of Gerard Dou's "The Doctor and his Patient" is presented with this number.

* * *

The current number of the *Prescriber* contains the usual therapeutic hints and notes that we are accustomed to look for in the pages of this up-to-date little monthly. In an editorial on the art of prescribing it is stated that "the art is not dead; it is merely asleep, and it lies with the profession to see that it does not oversleep itself." Where time is a consideration, as with many an overworked medical man, it is to be feared that the period of somnolence will be so prolonged that all desire to resume consciousness may be lost altogether.

* * *

"Minor Statesmen," reprinted from *Truth* (London: "Truth" Publishing Company, 1913), is further described on the title-page as "a series of complimentary calumnies on illustrious men, including Mrs. Pankhurst." Readers of *Truth* already know these clever, if light, character sketches of more or less prominent persons. The characterisations are on the whole good-humoured, though the humour is sometimes acid. In the case only of Mrs. Pankhurst has this acidity become vitriolic. The book is an excellent one for the railway carriage or the waiting-room.

* * *

Those parents who contemplate keeping careful records of the physical, mental and spiritual progress of their offspring will find the "Progress Book," a revised and enlarged edition of which has just been issued by the proprietors of Mellin's Food, Ltd., a valuable register for this purpose. It has been compiled by Dr. J. J. Pilley, Ph.D., and every phase of development is provided for from the time of birth until coming of age and after. Weight-charts, blank spaces for photographs at different ages, an autograph and finger-print register, are among the many interesting features of this interesting book which should be in the hands of every parent. It is published in different bindings at 1s. 6d., 2s. and 3s. We are requested to announce that a copy may be obtained by the first thousand readers of this Journal who will cut out this notice and send it with ninepence in stamps to the Secretary. Marlboro Works, Peckham, S.E.

MEDICAL NEWS & PASS LISTS.

Medical Sickness and Accident Society.

At the last monthly meeting of the Executive Committee of this Society, the claim account presented showed a decided reduction in the amount and was not above the expectation. New business was well above the number for the corresponding month in preceding years and is still rising. The increasing interest taken by the profession in the Society and the many inquiries received at the head office in Chancery Lane prove that the solid business basis on which this is run and the fair way in which all claims are met is much appreciated.

For 30 years now the Society has steadily progressed, and from quite a small concern has gradually developed into one of some prominence in the insurance world, with invested reserves of over £260,000. The Committee at this meeting discussed some changes of the rules which are to be submitted to the members at the annual meeting next year. It has been thought advisable to bring these more up to date and give greater facilities for dealing with sundry matters which from time to time have arisen in the past. The basis of the quinquennial valuation was approved, and it was resolved that this should be done by the actuary to the Society as before. The substantial bonuses paid to members insured for sickness benefit on their attaining age 65 has come as a pleasant surprise to many members, and it is confidently hoped to be able to maintain this during the next quinquennium.

Apothecaries' Hall Dinner.

The Governor of the Apothecaries' Hall, Dublin, Alderman McWalter, M.D., entertained a large company to dinner in the Hotel Metropole on the 29th November. The principal speaker was the Recorder of Dublin, who discussed the housing question in Dublin and its bearings on crime Among others who spoke were Sir Charles Cameron, the President of University College (Dr. Coffey), the President of the Royal College of Surgeons (Mr. Purefoy), the Vice-President (Mr. Dwyer), Dr. Rowlette, Mr. R. C. B. Maunsell, Dr. Hayes, Mr. Dodlin, Alderman Maguire, and Mr. Quaid, T.C. An excellent musical programme was rendered.

Complimentary Dinner to Sir Andrew Horne and Sir Robert Woods.

The Master of the Rolls presided over a large company which assembled in the Examination Hall of the Royal College of Surgeons in Ireland last Thursday, when a complimentary banquet was given in honour of Sir Andrew J. Horne and Sir Robt. H. Woods, who had recently conferred on them the honour of Knighthood. Some 150 were present, including Fellows of the two Royal Colleges, and members of the clerical, legal, and other professions. The Presidents of both Royal Colleges attended with the maces.

In proposing the toast of the guests of the evening, Dr. James Little said he had the opportunity of watching the career of these distinguished men from the moment when they put their first step on the professional ladder until they had attained the exalted position which they now occupied. The Government had very properly made recognition of the members of their profession. It was quite right that they should honour a profession which, in some respects, was not so well fitted for the rush of life as were other professions. Their profession did not afford the opportunities of amassing an immense fortune or of gaining that position in life which some men aspired to, but they had assembled to signify their concurrence in the choice of the Lord Lieutenant, and they thoroughly endorsed what he had done in recommending these gentlemen for the honour conferred on them. Sir Andrew Horne, as President of the College of Physicians, had discharged his duties with urbanity and tact, and as President of the College of Surgeons Sir Robert Woods had acquitted himself with marked distinction.

Sir Andrew Horne, in responding, said His

Majesty had conferred upon him a distinction which he never ambitioned and he never sought, but he thanked His Excellency for recommending his name. One of his greatest gratifications on receiving that distinction was the warm tributes he received from all his friends, and the fact that he had associated with him his old friend, Sir Robert Woods. It was a happy augury to find that night that the two Colleges of Physicians and Surgeons were now so intimately united.

Sir Robert Woods also acknowledged the great honour which had been conferred upon him. He would feel it incumbent on him to try to live up to the high ideal which Dr. Little had set before them.

An excellent musical programme followed.

Suicide of a Medical Man.

A VERDICT of "Suicide whilst insane" was returned at the inquest held last week on Dr. David Owen, a well-known medical practitioner, of St. Brelades, Pendlebury, who was found dead in bed with a wound in his groin.

The deceased, who was 49 years of age, had an extensive practice, and for some years had been the medical adviser of Messrs. Andrew Knowles and Sons, colliery proprietors. Recently he had seemed unduly depressed. His work seemed to have worried him, said the Coroner, and he felt he could not get through with it. On the 28th ult. he retired apparently in his normal condition, and the next morning he was found dead, the bed being saturated with blood. He had evidently divided a large blood-vessel in the thigh with a razor, which was found on a chair at the side of the bed.

Mr. Hugh Owen said that Dr. Owen, his brother, had suffered from Bright's disease for some years, and on the night before his death witness had arranged for a locum tenens to look after his practice. He had been subject to fits of depression, and early on Saturday morning, when asked if anything was the matter, replied from the bedroom that he was all right, but had not had a wink of sleep.

The jury and the Coroner expressed their sympathy with the doctor's relatives.

The Late Dr. Alabone.

THE funeral took place recently at Abney Park Cemetery, of Dr. Edwin W. Alabone, ex-M.R.C.S. Eng., of Highbury Quadrant. Deceased, who was 65 years of age, was a well-known specialist in the treatment of consumption and diseases of the chest, and patients came to him from all parts of the globe. Those who were in too weak a condition to travel were visited by the doctor, regardless of distance, and others in remote parts of the world needing his assistance were treated through the medium of correspondence. He also enjoyed considerable repute as a microscopist, botanist and painter.

The Hampstead Health Institute.

H.R.H. PRINCESS LOUISE, who was accompanied by the Duke of Argyll, opened last week the Hampstead Health Institute, which has been established in Kingsgate Road at a cost of over £3,000 as a memorial to King Edward. The Royal party were received by the Mayor and Town Clerk of Hampstead, the Bishop of Willesden, and others.

The Mayor of Hampstead, in moving a vote of thanks to the Princess, said the work of the institute would be divided into two parts, one comprising a school of domestic economy, with a clinic for children and various other social works, and the other the tuberculosis dispensary. In the clinic children would receive proper medical supervision from infancy until the time when they passed into the care of the medical officers of the London County Council.

Fire in a Hospital.

THE Durham County Hospital was the scene last week of a fire which originated in the linen room, and when discovered it had a good hold.

Fortunately 13 women and eight children were removed by willing helpers to a place of safety, but, owing to the hard frost, great difficulty was experienced in getting a good supply of water. Happily, the inmates, who numbered 50, were never in serious danger. The sitting-room, immediately above the linen-room, occupied at the time by the matron, was damaged, the flooring being burnt through. The Newcastle Fire Brigade was telephoned for, but local effort succeeded in extinguishing the fire.

The Death of Dr. Dimock.

IT is announced that Professor G. Sims Woodhead has received from the Home Office, in answer to his suggestion that a public inquiry should be instituted into certain circumstances attending the prosecution and death of the late Dr. Dimock, a letter dated November 26th, in which it is stated that the Home Secretary had no power to institute any inquiry at which evidence would be taken on oath or at which the matters mentioned could be satisfactorily investigated.

It further says that the Home Secretary had communicated with the coroner, as he thought it possible that the evidence Dr. Sims Woodhead wished to offer might be heard at the inquest, but he gathered from the coroner's reply that he was not likely to hold that such evidence would be relevant to the question of the cause of Dr. Dimock's death. In these circumstances Mr. McKenna, to his regret, was unable to take any further steps in the matter.

University of London.

THE following candidates have passed the third (M.B., B.S.) examination with honours:—Hugh J. O. Ewing (a, e, University Medal), Univ. Bristol; Henry L. H. Greer (e), Queen's Univ., Belfast; Alfred E. Hallinan (b), Charing Cross Hosp.; Leslie M. Ladell (a), London Hosp.; Alexander C. Palmer (e), London Hosp.; Charles E. Thornton (a), Middlesex Hosp. (a) Distinguished in medicine. (b) Distinguished in pathology. (e) Distinguished in midwifery and diseases of women.

The following passed (names arranged alphabetically):—John Appleyard, Cuthbert H. Attenborough, Margaret M. Basden, Alured C. L. O'S. Bilderbeck, George F. Bradley, Albert J. Clarke, Raymond J. Clausen, Frederick W. T. Clemens, John A. Cowan, Jules M. Curé, John P. Davies, Richard D. Davy, Sheldon F. Dudley, William H. Eggar, Pattie R. Elliott, Abraham S. Erulkar, Douglas M. Gibson, Cyril E. Goddard, Charles F. Hacker, Claude C. Harrison, George M. Heiron, Philip H. Henson, Melville Hocken, Thomas H. Holroyd, James M. Joly, William H. Jones, Thomas P. Kilner, William Leslie, Muriel A. Lloyd, Margaret J. McEnery, Guy Matthews, Henry B. Parker, Hilda M. Pollard, William J. A. Quine, Henry M. Rashbrook, Aneurin E. Roberts, Arthur D. Rope, Douglas Ross, Arthur L. Shearwood, Hector Smith, Ernest N. Snowden, Edward S. Sowerby, J. Vaughan-James, Harry B. Walker, Edgar W. Whiting, Gerald Whittington.

University of Cambridge.

AT a Congregation held on December 6th the following degrees were conferred:—

M.D.—J. W. Linnell, St. John's.

Sc.D.—A. S. F. Grünbaum, Caius.

M.B. and B.C.—H. W. Barnes, Jesus; V. F. Soothill, Emmanuel; W. A. Stokes, Emmanuel.

M.B.—G. M. Parker, Emmanuel.

Trinity College, Dublin.

THE following candidates have passed the final medical examination, Part II., Michaelmas Term, 1913:—

Midwifery.—Ernest E. Lavy (Clk.), William O. Tobias, Trevor A. Lawder, passed on high marks; Quentin V. Brook Wallace, James N. Armstrong, Frances S. Mitchell, George Buchanan, John G. Butt, Thomas D. Power, Robert J. B. Madden, Hamilton B. Goulding, Charles D. M. Buckley, William H. Elliott, Nicholas H. H. Haskins, Robert A. Anderson, Fredk. G. Beatty, Kathleen D. Wallace, Robert I. Sullivan, Eric A. Lumley, Edward Evans, Joseph P. Quinn, John C. A. Dowse, George H. Wood, Francis A. L'Estrange, George S. McConkey, Thomas J. L. Thompson.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Dr. L. M. (London, E.).—Resorcin should not be employed upon the scalp if the hair be fair, as an objectionable coloration may be imparted. Stains may be got rid of by bathing with a weak solution of citric acid.

Mr. P. R. (Surbiton).—The medicinal use of opium, hyoscyamus, aloes, crocus and fig extract were certainly known to the ancient Egyptians, and their success in the treatment of glaucoma and ophthalmia was renowned.

WORKMEN'S COMPENSATION ACT, 1906

The Home Secretary gives notice that in consequence of the death of Dr. Frank Buszard the appointment of Medical Referee under the Workmen's Compensation Act, 1906, for Ampthill, Brackley, Buckingham, Kettering, Northampton and Wellingborough County Courts is now vacant. Applications for the post should be addressed to the Private Secretary, Home Office, and should reach him not later than the 31st December, 1913.

M.R.C.S. (Devon).—Oxygen has been injected hypodermically for various disorders. The latest use of this remedy is announced by Dr. Toulouse, the director of the asylum at Vilejuif, who has employed it in cases of epilepsy, mania and melancholia with distinct benefit. Further details of the method will be awaited with interest.

Meetings of the Societies, Lectures, &c.

Wednesday, December 10th.

Plymouth Medical Society (Athenæum Chambers, Athenæum Lane, Plymouth).—8.30 p.m.: Paper:—Mr. R. Jaques: A State Medical Service.

South-West London Medical Society (Bolingbroke Hospital; Wandsworth Common, S.W.).—9 p.m.: Mr. P. W. G. Sargent: Some Common Affections of the Knee Joint.

Hunterian Society (St. Bartholomew's Hospital (Library), E.C.).—9 p.m.: A Series of Short Papers will be read.

Thursday, December 11th.

Royal Society of Medicine (Section of Surgery: Subsection of Orthopædics) (1 Wimpole Street, W.).—4.30 p.m.: Cases by Mr. C. Max Page, Mr. R. C. Elmslie.

Royal Society of Medicine (Section of Neurology) (1 Wimpole Street, W.).—8 p.m.: Clinical Meeting. Demonstration of Cases: Dr. Turney, Dr. James Taylor, Dr. F. E. Batten, Dr. James Collier, Dr. Purves Stewart, Dr. Farquhar Buzzard.

North London Medical and Chirurgical Society (Board Room of the Great Northern Central Hospital, Holloway Road, N.).—9 p.m.: Paper:—Dr. Constance Long: Treatment by Psychotherapy.

Harveian Society of London (Stafford Rooms, Titchborne Street, Edgware Road, W.).—8.30 p.m.: Paper:—Sir Ronald Ross, K.C.B.: The Study of Infections byEnumerative Methods (illustrated by lantern slides).

Friday, December 12th.

Royal Society of Medicine (Section for the Study of Disease in Children) (1 Wimpole Street, W.).—4.30 p.m.: Discussion: On Enlargement of the Spleen in Children (opened by Dr. Robert Hutchison and Sir John Bland-Sutton). Followed by Dr. G. A. Sutherland and others

Royal Society of Medicine (Clinical Section) (1 Wimpole Street, W.).—8.30 p.m.: Cases by Dr. F. Parkes Weber, Mr. Arthur Evans, Mr. Thomas H. Kellock, Dr. Frederic S. Palmer.

Tuesday, December 16th.

Royal Society of Medicine (1 Wimpole Street, W.).—5 p.m.: General Meeting of Fellows: Ballot for Candidates for Fellowship.

Royal Society of Medicine (Section of Medicine) (1 Wimpole Street, W.).—5.30 p.m.: Paper:—Dr. F. W. Scott Macfie and Dr. J. H. L. Johnston: Experiments and Observations on Yellow Fever.

Appointments.

Barrington, F. J. F., M.S.Lond., F.R.C.S.Eng., Surgical Registrar to University College Hospital.

Clifford, Harold, M.B.Lond., F.R.C.S.Edin., M.R.C.S.Eng., L.R.C.P.Lond., Honorary Gynæcologist to the Salford Royal Hospital.

Fletcher, W. J., L.A.H.Dub., Certifying Surgeon under the Factory and Workshop Acts for the Stoney Stanton District of the county of Leicester.

Graham, Lewis, M.S.Lond., F.R.C.S.Eng., Honorary Obstetric Registrar to the Birmingham Maternity Hospital.

Hayes, J. G., L.R.C.P. & S.Irel., Clinical Assistant to the Chelsea Hospital for Women.

Mayne, W. H., M.B., B.Ch.,Dub., Certifying Surgeon under the Factory and Workshop Acts for the Warrenpoint District of the county of Down.

Vacancies.

Newcastle-upon-Tyne City Asylum, Gosforth, Newcastle-upon-Tyne.—Junior Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board and laundry. Applications to the Medical Superintendent.

Nottingham General Dispensary.—Resident Surgeon. Salary £220 per annum, with apartments, attendance, light and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

Northampton General Hospital.—Senior Resident Medical Officer. Salary £120 a year, with apartments, board, washing and attendance. Applications to C. S. Risbee, Secretary-Superintendent.

Joint Counties Asylum, Carmarthen, South Wales.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Corporation of Birmingham.—City Hospital, Lodge Road.—Assistant Resident Medical Officer. Salary £150 per annum, with board, residence, etc. Applications to the Medical Superintendent.

St. Bartholomew's Hospital, Rochester, Kent.—Resident House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to Charles Speyer, Secretary.

West Ham Union.—Second Assistant Medical Officer. Salary £140 per annum, with the usual residential allowances. Applications to Thomas Smith, Clerk, Board Room, Union Road, Leytonstone, N.E.

Ashton-under-Lyne Union.—Assistant Medical Officer. Salary £150 per annum, rations, laundry, and residence. Applications to G. H. Partington, Clerk to the Guardians, Poor-law Offices, Ashton-under-Lyne.

Births.

Barendt.—On December 4th, at 65 Rodney Street, Liverpool, W., the wife of Frank H. Barendt, M.D.Lond., F.R.C.S.Eng., of a son.

Davidson.—On December 4th, at 5 Western Parade, Southsea, the wife of Maurice Davidson, M.D., of a daughter.

Folliott.—On December 3rd, at 67 Weymouth Street, the wife of Fleet-Surgeon E. Folliott, R.N., H.M.S. "Iphigenia," of twin sons.

Kennard.—On December 4th, at 12 Bedford Square, W.C., the wife of Dudley Kennard, F.R.C.S., of a daughter (stillborn).

Leaning.—On November 28th, at Cromwell House, Gunnersbury, W., the wife of Dr. R. Craske Leaning, of a daughter.

Lucas.—On December 5th, at 19 Westbourne Terrace, the wife of Nathaniel S. Lucas, M.B., of a daughter.

Marriages.

Crossle—Du Bedat.—On November 22nd, at Holy Trinity Church, Killiney, Co. Dublin, Captain Howard Crossle, I.M.S., fourth son of the late F. C. Crossle, M.B., of Newry, to Mary Rosa, younger daughter of F. E. and the late Mrs. Du Bedat, Willmount, Killiney.

Deaths.

Jones.—On December 7th, at 109 Drakefield Road, Balham, Sydney Jones, M.B., F.R.C.S., in his 83rd year.

Price.—On November 28th, at Carmarthen, Rees Griffiths Price, M.D.Durh., L.R.C.P. and L.M.Edin., L.F.P.S.Glasg., aged 66.

Walker.—On December 4th, at 206 Peckham Rye, S.E., Josiah William Walker, M.D., in his 81st year.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, DECEMBER 17, 1913. NO. 25.

NOTES AND COMMENTS.

Medical Man Vindicated. Of all the risks run by medical men in their professional work, few are so insidious or fraught with such damaging consequences as that of a false accusation of crime levelled at them by weak-minded or designing individuals. Thus a charge of assault is not infrequently preferred against a medical man by an hysterical or emotional woman after a physical examination has been made, more particularly when no third person has been present during the consultation. It cannot be too strongly emphasised that a third person should invariably be present during the medical examination of a female patient by a male practitioner for the protection of the latter, though there may be exceptional circumstances when this is not possible nor desirable. The hearing was concluded on Monday last before Mr. Justice Lawrence and a special jury of a case in which the plaintiff, a girl of eighteen, suffering from dysmenorrhœa, sued Dr. J. D. Bridger, of Willesden, for assaults alleged to have been committed by him on three occasions at his surgery. The defence was that after the patient's consent had been obtained and medicine had been given a properly conducted examination was made on two occasions. The patient's mother was said to have attacked Dr. Bridger with a dog-whip several times and to have behaved in a very excited manner in his surgery before other patients. As the learned judge remarked, to get her daughter to pose for photographs to be handed to the papers was not good taste, and to publish to the world her daughter's charms was evidence of a highly excited and ill-balanced mind. The child of such a mother might easily have wild and fantastic imaginings. A verdict was ultimately given for the defendant, and Dr. Bridger may be congratulated upon the satisfactory issue of a very trying ordeal.

The Motor Traffic Danger. THE danger of motor traffic in London is increasing year by year. The problem has aroused general attention, yet the toll of accidents and the death-roll show a steady upward curve. It is agreed on all hands that something must be done to protect the public, but the pity of it all is that no one appears to be able to suggest any really practical remedy. One of the chief disturbing elements is the widely differing rates at which wheeled traffic proceeds through the streets. Horses are disappearing fast, and in a few years' time nine-tenths or more of the vehicles will, in all probability, be mechanically propelled. Some of the ways in which greater safety may be secured seem fairly obvious, such as, for instance, subways for pedestrians at crowded parts, speed regulations, tests of physical fitness for chauffeurs, and so on. The real safety ideal, however, has yet to be discovered. Possibly London may learn something from Germany, where, in spite of multitudinous bye-laws, the protection of the citizen is secured in solid, Teutonic fashion.

How Berlin Goes to Work. As a matter of statistics, in Berlin 56 persons were killed and 2,700 injured per million residents during the year 1912. Greater London, on the other hand, shows no less than 76 killed and 2,700 injured per million residents. Next comes the interesting statement that the average number of journeys per head of population in London aggregate 230 per annum, whereas in Berlin they exceed 300. What do these figures mean? After allowing fully for the fallacies of figures, it seems clear as daylight that the Berlin traffic is considerably less dangerous to the public than that of London. One significant fact is that London, the more dangerous, possesses 1,500 tramcars and 3,000 motor buses, while Berlin, the less dangerous, has 3,000 tramcars and only 200 motor buses. Another pregnant fact is that Berlin has a central board of traffic control, in which each city and suburban district has a proportionate control. The German ideal, moreover, is that of wide streets with parallel ways, wherever possible, for traffic of varying speeds. Why should not London have a strong central traffic board and a greater proportion of tramcars to motor buses, if by such means her streets can be rendered as safe as those of Berlin? Why not?

Radium for Hospitals. THE use of radium in the treatment of certain forms of malignant disease may be said to have passed into the realms of practical therapeutics. A hospital without radium may, therefore, be considered, not only as being behind the times, but also as neglecting to provide one of the most modern weapons in the treatment of its patients. The plea of expense may well be urged by those hospital authorities who are not yet in possession of a few grains of the precious metal. To meet this legitimate objection, the important announcement was made the other day at the quarterly meeting of the Governors of the Middlesex Hospital by Prince Alexander of Teck that he had made a suggestion to the Council of King Edward's Hospital Fund with the object of securing a more economical provision of radium for use in the London hospitals. In order to avoid the capital account of these institutions being drawn upon for this purpose, he has asked the Council to consider whether they could purchase a quantity of radium, and allow all the London hospitals to utilise the emanations which could be collected from it at the price of their production. If such a scheme were adopted, the cost of radium treatment would be reduced tenfold. His Royal Highness has, moreover, offered, on behalf of the Middlesex Hospital, to arrange for the preparation of these emanations in their Cancer Research Laboratories, so that the various hospitals participating in the scheme could obtain tubes of the emanations at a price extremely small compared with the cost of purchasing them in the open market. Such a method for obtaining radium seems a very sensible one, and it is to be hoped that the scheme may commend itself to the managers of the King Edward's Hospital Fund.

The Tortoise Bacilli Boom.

THE history of medicine presents a strange medley of superstitions, fads, fashions, South Sea bubbles, personal booms, mingled with a vast redeeming amount of devoted searching after truth, and here and there a solid stride ahead in scientific knowledge. After all said and done, the world owes an untold debt to the humble and ill-requited toilers after truth, who have done more to better the lot of mankind than all the soldiers who have fought for less noble purposes since man first evolved into an animal capable of using arms and of organising armies. To turn from this picture to that of a German medical man who, by all accounts, has reaped a huge fortune in America from an alleged cure for consumption is, indeed, to look upon a counterfeit presentment—two brothers of widely differing character. Dr. Friedmann's curative tortoise serum was not accepted by the orthodox medical profession in the United States, but that fact apparently did not prevent its adoption by a heavily capitalised commercial syndicate. Dr. Friedmann has since returned to Berlin and, according to recent reports, has at last consented to permit his serum to be used by all German physicians. It seems clear that, even under the most favourable circumstances, a long time must elapse before medical experts will be enabled to arrive at definite conclusions as to the value of the remedy, which nevertheless created a record "boom" in the United States.

LEADING ARTICLES.

THE DISCOVERY OF THE LIFE CYCLE OF THE ORGANISM OF SYPHILIS.

THE discovery of the specific pathogenic organism of syphilis by Schaudinn in 1905 constituted a great landmark in the history of medical science. Naturally, an advance of that importance stimulated further research in all parts of the civilised world, and this culminated in 1912 by the publication of an article in the *Lancet* of October 12th, by Mr. J. R. McDonagh. The gist of his communication was that the spirochæta pallida was an adult male, that there was also a female, and that spores resulted from the fertilisation of the latter by the spirochæta, and that these spores were able to start another life cycle. McDonagh's article of October 12th announced a great scientific observation. It was followed by a correspondence that hinted rather than directly claimed priority of discovery on the part of Mr. E. H. Ross. As the matter is one of great interest to the medical world, we have thought it right to examine the facts with a view of settling the question of originality once for all. On October 19th a letter appeared in the *Lancet* from Mr. H. C. Ross, stating his opinion that Mr. McDonagh had rather jumped to conclusions, and that he founded that view on the strength of work done by E. H. Ross and Dr. W. Cropper in the McFadyean Research Laboratories. By the well-known jelly method his brother had demonstrated in a protozoal parasite in the lymphocytes of a guinea-pig a final transformation into free swimming sprochætes. Cropper discovered a similar organism in the cells of the vesiculæ seminales of earthworms. Mr. H. C. Ross admitted that his brother, E. H. Ross, had obtained material from McDonagh at the Lock Hospital which he had visited for the purpose. He added that his brother had there informed McDonagh as to his researches. At the same time he admitted that McDonagh gave his brother some slides which he stated show "splodges" in the cells. This letter called forth a prompt answer from McDonagh, who wrote on October 26th stating that his special investigations began in January, 1912: that E. H. Ross came to the Lock Hospital on September 14th, and was informed of McDonagh's finding certain bodies in infected lymphatic glands, and of the latter a specimen was given to Mr. Ross. On September 28th, Sir Ronald Ross wrote to the *British Medical Journal*, saying that his brother, E. H. Ross, had found bodies in syphilis "not in the mononuclear leucocytes of the blood, but in large mononuclear cells squeezed from local lymphatics." It is thus evident that E. H. Ross obtained syphilitic gland tissue and slides from McDonagh on September 7th, and a week later his brother is claiming for him credit for an observation derived from a study of gland tissue furnished by McDonagh who also supplied microscopic slides and an account of his special observations. McDonagh, moreover, had directly studied the living organism, and, amongst other things, saw the act of impregnation. He has pointed out that Ross used the jelly method, which at once kills the organisms, whereas his observations were made on the live bodies stained by borax methylene blue. Moreover, the original stain used by Ross was Azur II., which has no metachromatic properties, but later polychrome methylene blue was employed, which is to all intents and purposes the same stain as borax methylene blue used solely by McDonagh for his *in vivo* study. As the jelly method kills the organisms, Ross was unable to witness impregnation, and hence could not say which body was or was not the female. Then, again, McDonagh published an illustration of the life cycle of the male and female organism, which formed part of a paper read before the Pathological section of the Royal Society of Medicine, December 3rd, in the *Lancet* of December 14th. Ross followed with his drawings in the *British Medical Journal* of December 14th, 1912. Since then some illustrations by Ross have been published in Castellani's book on "Tropical Diseases," but his picture differs materially from that figured by him in the above-mentioned article, the chief difference being that the bodies in the second case were arranged in a scheme resembling that of McDonagh's. All this internal evidence points to McDonagh as first in the field. Ross, indeed, has not entered the lists in person, but he or his friends, in order to establish any claim to priority, will have to show (a) that he did not obtain material and special information from McDonagh; (b) that he examined the organisms *in vivo*; (c) that he witnessed impregnation; (d) that McDonagh's sections in his possession show nothing more than "splodges"—*i.e.*, they do not illustrate the changes decribed by McDonagh. The coloured plates and photographs of nearly every phase, which were made from sections, and which illustrate McDonagh's article in the *Dermatologische Wochenschrift* Bd. 56 S 413, 1913, do more than depict "splodges." In fact, it is doubtful whether finer photographs of organisms than these have ever yet been printed. It appears that in a recent number of the *Biochemical Journal*, October, 1913, McDonagh has even worked out the chemistry of the various phases of the life cycle of the syphilitic parasite. Such a feat has never been achieved before; its importance is of the greatest magnitude, since it opens up an entirely new field for medical research. Most candid critics will probably agree with us that on the facts cited the weight of evidence is overwhelmingly in favour of McDonagh. British dermatology has long been dwarfed and discouraged by the internal jealousies and petty spitefulness of its self-constituted leaders. It would be a great pity if the only great discovery that has been made in that special study for a generation or more should be minimised by an ungracious and, so far as can be judged, a groundless claim for priority. In our opinion, the honours rest indubitably with McDonagh as first in the field both in discovery and publication.

GONORRHŒA IN ITS MODERN ASPECTS.

Now that the Royal Commission upon Venereal Diseases has been appointed the appearance of an authoritative book upon gonorrhœa is opportune, and it may be well in introducing Luys' book (*a*) to the notice of our readers, to say a few words concerning a hitherto much neglected subject. Lest a false notion should be suggested by a reference to the Royal Commission, it may be at once surmised that its labours will end in naught, simply sharing the fate of, say, some eighty or ninety per cent. of previous official investigations of a similar kind. We have little hesitation in predicting that the Royal Commission upon venereal diseases is foredoomed to absolute failure so far as actual practical achievement is concerned. Moreover, there is reason for thinking that those who brought it forward anticipated no other result than extinction by exhaustion, just as in the case of the inquiry into patent medicines and quack practice. At the same time, it is clear that an extremely valuable function may appertain indirectly to such an investigation, namely, that resulting from the education of the public. The importance of the bearing of gonorrhœa upon the general health has long been recognised by medical men, and its serious aspects are now much more widely recognised. The discovery of the relation of the gonococcus to conditions of the female pelvic organs demanding grave surgical operations constituted a new era in gynæcology. Nor has the full significance of gonococchæmia and gonococcal joint affections been yet grasped from a preventive and curative point of view. It is obviously impossible within present limits of a brief notice to discuss the subject adequately even in its broader aspects. Every medical practitioner will do well to study the scientific aspect of the malady, as he cannot fail to find matter of everyday interest, whatever may be his field of practice. A generation ago gonorrhœa received scant attention, whereas nowadays it taxes our best scientific resources. It is no longer customary to dismiss a patient with a prescription for an injection and directions to procure a supply of capsules of santal wood or copaiba oil. Turn to page 374 of Mr. Arthur Foerster's excellent translation of Luys' book and we find a concise *résumé* of the general lines of treatment in chronic urethritis. At the outset, it is stated, "urethro-vesical irrigations diminish the intensity of the inflammation. As soon as possible one combines them with massage of the glands connected with the urethra (prostate, seminal vesicles, Cowper's glands). When all inflammatory symptoms have disappeared, slow, methodical and far-pushed dilatation of the urethral mucuous membrane is indicated. Once it has reached a certain degree, urethroscopy can be applied without difficulty. It enables one to tell if there are any diseased patches left which require special treatment (dilatation of the highest degree). Once the latter has done its duty, a new urethroscopic examination is necessary, and on the finding which it yields will depend the choice of further treatment by intra-urethral applications of the galvanic cautery, electrolysis, and so on." All this points to a rational and expensive scheme of therapeutics in gonorrhœa. Some day the vaccine therapy of the disease may be converted into a rapid and trustworthy method of cure. Even now it has greatly increased our control over the risks ensuing from secondary infection. So far as preventive measures are concerned it seems unlikely or, indeed, impossible from the essential circumstances of the case that compulsory notification can ever be applied to gonorrhœa. It may well be, however, that the law will render it a punishable offence knowingly to communicate the disease to another person.

(*a*) "Text-book of Gonorrhœa." By Dr. G. Luys, translated by Arthur Foerster, M.R.C.S., L.R.C.P. Baillière, Tindall and Co.

CURRENT TOPICS.

The Prescription.

The power of the prescription is not what it was. A few decades ago it was almost the end instead of the means of medicine. At a consultation the ceremony of "writing the prescription" was the climax. A table, with new pens and the other paraphernalia of orthography, was prepared. The physician carefully wrote the mystic script in sonorous Latin with a drug for every symptom and some extra ones thrown in to fill up the page and a few more added as correctives of the rest. The well-being of the prescription was hardly second to that of the patient. Now we see a difference. When the drugs are not incompatible the expressions used in their demand certainly are. A curious mixture of passable English and impossible Latin with a dash of trade names in no language on earth is presented to the pharmacist. Roman numerals used for easy numbers and Arabic for difficult ones like "48" are found jogging one another on the same sheet. The whole thing is unscholarly and slipshod, and not likely to make a favourable impression on an observant public. Besides being a disgrace to our profession, our slovenliness is reacting on the chemists, who are seriously considering whether or no Latin shall continue to be compulsory in their curriculum. The doctors no longer write Latin, so why should the chemists trouble to learn it? As a test, write

℞ Tr. Scillæ
Syr. Ejusdem

take the slip to the nearest chemist, and it is long odds that he will tell you that he has not got the second ingredient.

Sport and Health.

In view of the great prominence given to sport in our modern educational system, the question naturally arises as to what may be the ultimate effect of such training upon the national physique. Not every boy who has excelled in sport in his schooldays becomes a champion athlete in after-life, for circumstances may completely put a stop to further indulgence in his favourite game or pastime. Is the value of athleticism to the individual over-rated? Sir Thomas Oliver, M.D., in a lecture upon "Medico-Social Problems from an Insurance Point of View," delivered at Newcastle the other day, stated that athletic exercises possessed certain physical advantages, such as bracing a man up and making him more resistant to fatigue, but that they did not confer immunity against disease. It is a well-known fact that it is frequently the healthiest-looking men and women, also the most florid, who succumb most readily to fever, or to acute illness. Heart disease and tuberculosis are not unknown among sportsmen. As a matter of fact, hard athletic exercise is not the best training for young men who are destined for office-life or for some sedentary occupation. While it may be true that the symmetry of a well-trained body may command admiration, it remains a question whether the more perfected anatomical form renders an individual proportionately more able to cope with disease than his less muscularly developed colleague. It has yet to be demonstrated that the pupils of those schools where physical prowess is deified are more long-lived than those trained in colleges where such exercises are kept within moderate bounds. One of the most useful branches of physical exercise, and the one to be encouraged on account of the discipline associated therewith, is military training, which provides that co-ordination of physical and mental self-control that characterises the best type of manhood.

Celluloid Dangers.

Public attention has frequently been called to the dangers connected with the use of such an inflammable article as celluloid. Since its invention in 1869, the use of this commodity has steadily increased, more especially in connection with the preparation of cinematograph and other films. It will be remembered that a Departmental Committee was appointed in October, 1912, "to inquire and report as to the precautions necessary in the use of celluloid and celluloid articles." This Committee has now issued its report. Special attention is drawn to the conditions of storage of cinematograph films, the celluloid employed for the preparation of which is said to be more highly nitrated than ordinary celluloid, and therefore more inflammable. The regulations of the Cinematograph Act, 1909, are, on the whole, sufficient to ensure the safety of the public in places where films are exhibited, and certain concessions are properly made where the so-called "non-inflammable" films are in use. It is in film stores that a greater system of inspection appears to be needed, the more so because many of the premises in London are crowded together in narrow thoroughfares in the neighbourhood of Charing Cross Road. The festooning of films in shop windows is a practice which is quite inexcusable and should be absolutely prohibited, and it is satisfactory to note that such exhibits are repudiated by the regular trade. The Committee states that the sale of toy machines, as well as strips of disused films, to children containing no safeguards against fire should be prohibited. As regards articles of apparel manufactured from celluloid, such as buckles, combs, cuffs and collars, it is suggested that they should not be sold to the public without some clear indication of their real nature being given. It is to be hoped that the recommendations of the Committee will be enforced by all local authorities.

Subjects for Post-Graduate Study.

It is not always an easy matter for deans and secretaries of medical post-graduate colleges to arrange a course of lectures or demonstrations for medical men that will prove really helpful to them in their daily practice. A series of lectures dealing with the different aspects of some common disease is far more useful to the majority of practitioners than one treating of some rare affection little likely to be encountered by anyone except a specialist. In some colleges, the plan of holding a course upon certain special diseases, such as syphilis or tuberculosis, dealt with from every conceivable standpoint so as to interest medical men in every department of practice, has proved a great success. A post-graduate course on the feeding and care of infants, with special reference to the milk supply, has been arranged by the National Association for the Prevention of Infant Mortality and for the Welfare of Infancy. It is to be held in the New Year, from January 12th to the 22nd, at various centres. The programme, which is most comprehensive, includes such subjects as the physiology of lactation, the bacteriology of milk, nutritional disorders of childhood, and other topics related to infant care and feeding. Certain of the day courses are open to non-medical persons, such as nurses, health-visitors, and others. For the modest sum of one guinea a complete symposium on infant feeding can be gone through with, extending over a period of ten days, with three or four sessions a day. Further particulars may be obtained from the Secretary of the Association, 4, Tavistock Square, London, W.C. It only remains to add that the advisory committee for the special course consists of men whose names are a household word among the profession.

The Unprotected Hatpin.

Few women realise the murderous character of the sharp points that gaily project from beyond the margin of the hats covering their unsuspecting crania. Thus protected, or adorned, according to the mental attitude of the wearer, the average woman will take her place among a throng of people waiting, perhaps, to board a tramcar, little thinking of the risks run by both sexes from being hustled and jostled together in such company by the sudden movements of the car. Now that small hats are the fashion, the peril is all the greater to passengers in public conveyances from this source. A warning notice was posted in all the London County Council tramcars last week directing the attention of lady passengers to the danger to their fellow-travellers and to the Company's servants of wearing hat-pins with unprotected points. This mild announcement may cause a slight sensation for a time, but it would be more to the point, literally, to prohibit the use of unprotected hat-pins altogether, as has been done successfully by the new Prefect of Police in Paris. It ought not to be impossible to provide that the points of all hat-pins shall be suitably protected by sheaths, which, in fact, are already sold by milliners for the purpose, in the case of female passengers by any public conveyance. Until the travelling public be adequately safeguarded from injury, the conductors of omnibuses and trams, and the guards of trains, might well be provided with a supply of corks, which could be made quite ornamental, wherewith to shield a particularly murderous-looking point. But perhaps the cost to the respective companies would be too prohibitive. No doubt good sense and decorative art will rise to the occasion.

The British Medical Association and Ireland.

The recent decision of the British Medical Association to increase its subscription to two guineas is likely to have important effects on its relation to the profession in Ireland. The causes which have led to the necessity for such an increase have had to do almost altogether with the interests of the profession in Great Britain. The problems facing the medical profession of Ireland under the Insurance Act are very different from those with which the Association has been mainly concerned, and whether any great political change in the relation of the two countries takes place or not, this difference is likely to persist. From the vast expenditure of the last few years the Irish profession has profited little, and, as a consequence, medical men in Ireland show little inclination to dip their hands deeper in their pockets. It must be admitted also that for many years past there has been a growing discontent in Ireland with the attitude of the official journal of the Association toward that country. We need not go into the reasons of that discontent, but that it is there is beyond question. The inevitable result of the present position will be that many members of the Association resident in Ireland will cease to subscribe. We do not think that the proposed establishment of a branch office in Ireland will have much effect, nor do we think that the Association can ever hope to be a representative organisation of the profession in Ireland. A unique opportunity is hereby opened to the Irish Medical Association to become a thoroughly representative body, and to embrace in its ranks the great bulk of the medical profession of Ireland. We are glad to know that several influential members are fully alive to the possibilities of the situation.

PERSONAL.

H.M. the Queen visited the Derbyshire Royal Infirmary last week, spending some time in the wards of the institution.

Dr. R. A. Fleming, M.A., M.D., F.R.C.P.Edin., has been appointed Physician to the Edinburgh Royal Infirmary.

The title of Reader in Pathology has been conferred upon Dr. William Hunter, of Charing Cross Hospital Medical School.

Mr. Lewis Graham, M.S.Lond., F.R.C.S.Eng., has been appointed Honorary Obstetric Registrar to the Birmingham Maternity Hospital.

Dr. H. W. Catto has been selected for appointment as an Assistant Bacteriologist and Pathologist in the Medical Department of Jamaica.

Mr J. J. Guthrie Blandford, M.R.C.S., L.R.C.P.Lond., has been appointed Medical Superintendent of the Whalley Asylum, Lancashire.

Professor C. J. Martin, F.R.S., D.Sc., M.B.Lond., F.R.C.P., has been appointed President of the Section of Physiology of the British Association for the Australian meeting in August next.

Dr. T. Knowles Boney, of North Finchley, has been awarded the Savill prize and medal at the West End Hospital for Diseases of the Nervous System for his thesis on "Myasthenia Gravis."

Dr. D. J. Clark, of the Park Hill Sanatorium, Liverpool, and Dr. W. C. D. Hills, of the Sowerby Bridge Tuberculosis Dispensary, Halifax, have been appointed tuberculosis officers to the Kent County Council.

Major R. J. Blackham, R.A.M.C., Honorary Surgeon to the Viceroy, who is the Assistant Commissioner of the St. John Ambulance Brigade in India, was the recipient recently of an address of congratulation from the Bombay corps of the brigade on his being created C.I.E. The address was enclosed in a beautiful and valuable silver casket.

The Council of the Royal College of Surgeons of England have appointed Mr. D'Arcy Power, F.R.C.S., Surgeon to St. Bartholomew's Hospital; Mr. F. Richardson Cross, F.R.C.S., President of the Ophthalmological Society of the United Kingdom; and Mr. S. G. Shattock, F.R.C.S., Pathological Curator of the Museum of the College, to give evidence before the Royal Commission on Venereal Diseases.

FRENCH CLINICAL LECTURE

ON

DEFENSIVE REFLEXES: THEIR SEMEIOLOGICAL AND PROGNOSTIC VALUE.

By Dr. HENRI CLAUDE,

Professeur Agrege de la Faculte de Medecine de Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE interest attaching to the study of tendinous and cutaneous reflexes in clinical neurology is well known to all. The variations of these reflexes enable us to affirm the existence of a suspected organic lesion, and to distinguish it from a purely functional neuropathic trouble; also to localise the irritative or destructive alteration. The names of Westphal (1875) Vulpian, Strumpell, and Babinski are inseparably attached to the history of these signs, of which the importance is really so great that we have some difficulty in conceiving how, forty years ago, anyone could have ventured without them to enter the labyrinthine maze of nervous symptomatology. In these later times, on the other hand, the number of those reflexes has been multiplied to infinity, and the excessive zeal of the explorers has somewhat clouded the clarity of this department of semeiology. An exception may well be made to this general observation, with regard to the reflexes which have been called defensive; of which the determination preserves a very real value.

The classical experiment, of section of the cervical medulla in the frog producing a hyper-excitability of the limbs, had long before attracted the attention of physiologists. In the department of clinical neurology, A. Thomas has pointed out in a recent article ("La paraplégie spasmodique avec contracture variable."—*La Clinique*, 20, 27 juin, 1913) the existence of reflex movements of defence in many cases—notably in a case of paraplegia with flexure. Charcot had made the same remark. Brown-Sequard gave a specially detailed description of such phenomena in certain paraplegics; which are independent of the will, and are provoked by the slightest stimulation of the integuments. Finally, Vulpian studied these muscular contractions with the greatest care from the physiological view-point; so that we may well—with A. Thomas—be surprised that those great observers had not been remembered by contemporary authors.

Let us now see how those defensive reflexes display themselves—taking, as a typical case, one of Pott's disease in the lower dorsal region. The patient is incapable of any spontaneous movement; he is anæsthetic as high as the middle of the abdomen; the tendon reflexes may be either exaggerated or feeble. If we stimulate the skin of any part of the lower limbs by pricking or pinching, we see the following series of movements, which are all the more surprising on account of the presence of complete motor and sensory paralysis: Hyper-extension of the toes, and, above all, of the great toe; flexion of the foot on the leg, of the leg on the thigh, and of the thigh on the pelvis. The combination of those movements, which sometimes result slowly, sometimes very suddenly, represents a co-ordinate act of retreat of the limb, which flies, as it were, from the source of irritation. In some patients, the first stage of the reflex movement consists of adduction of the thighs; more rarely, there is abduction on one side; finally, in certain cases, to which we shall again refer, there is no retreat of the limb, but extension.

As a rule, the slightest stimulation of the skin suffices to produce the reflex movement. One of my patients presented those movements on the slightest shaking of his bed; also hearing the noise of a door somewhat violently closed, at a distance. Sometimes vigorous pricking or pinching of the skin is necessary to produce a complete retreat of the limb; less than this gives only a slight imitation of such, or merely a movement of the toes or of the foot. Generally, the intensity of the movement of retreat is proportional to that of the stimulation. In certain cases, stimulation of the skin of the abdomen, or even of that of the thorax, gives the same effect. Thus there is a whole tegumental territory, well defined, stimulation of any part of which produces the reflex movements. Constriction of the limb, pressure on the muscular masses, forced flexion of the toes and constriction of the metatarsus (Marie and Foix), forced supination of the forearm (H. Claude), passage of an electric current, hot or cold applications, irritation of the urethral or rectal mucous membranes, have the same effect. I have noted the undefinable sensation of malaise which patients usually feel during those tests. One who was completely anæsthetic declared that he experienced a sensation of pain when the retreat movement of the limb was produced by pinching; he was not able to localise it, but it had a quite special agonising character that was very difficult to describe.

These defensive phenomena are also observed in patients who are not paraplegic or anæsthetic, and have a wholly special diagnostic value; although the experiment is less demonstrative than in the completely paralytic cases: at the beginning of compressions of the cord, the diminution of strength is sometimes accompanied by exaggeration of the tendon reflexes, of the toe-phenomenon, and a special painful sensibility to pressure of the skin; accompanied by retreat of the limb. When the patient is questioned about the character of the pain which he feels, it is found that above a transverse line corresponding to the seat of compression, pinching of the skin produces a sensation which is merely disagreeable. But below that level, over all the inferior surface of the body, he experiences a truly agonising pain, accompanied by redness of the face and various emotional reactions.

It seems that the so-called *spontaneous* movements, accompanied by painful cramps, of which paraplegic patients often complain, present some analogies with those defensive movements. In fact, when we remember how slight and superficial the peripheral stimuli of the integument may be which provoke those movements of retreat, it would appear that the cause of the movement has possibly escaped the patient; and provoked a movement which appeared to be spontaneous.

The so-called defensive movements are not confined to the lower limbs; they can be produced in the upper limbs in cases of quadriplegia, in the way referred to above; by stimulation of a portion of the limb, especially by forced supination of the forearm, or pinching the cervical region. The movement consists at first of flexion of the wrist with slight adduction; flexion of the forearm on the arm, with pronation; and, finally, abduction of the arm. They are also produced in some cases of hemiplegia—but only in certain forms; they are provoked by non-destructive lesions of the pyramidal tract, cerebral œdema, a juxta-pyramidal focus of hæmorrhage or softening, cerebral tumour, meningeal hæmorrhage, etc. This is the phenomenon which I described, in 1900, under the name of *reflex hyperkinesis* in hemiplegia, and to which I attach a favourable prognostic significance; from the fact that, in my opinion, it indicates the existence of compression or irritation of the superior fibres of the motor tract, and not a section of this same.

An important point which it is desirable to place in relief in the clinical study of these phenomena of defence, is that: the movement of the several segments of the limbs which is produced by the stimulation is always repeated under the same form in the same patient, according to the area stimulated (Vulpian). When we pinch the skin about the ankle or the calf, we produce, according as the stimulus is more or less intense, extension of the toe and flexion of the foot; or, indeed, retreat of the whole limb. In another area, another movement is provoked by the same stimulus. P. Marie and Foix saw a patient in whom stimulation of the leg elicited a brusque movement of retreat, while extension of the whole limb followed pinching of the skin of the front of the thigh; or, if flexion occurred, it was always incomplete. I have a patient who presents rigidity in the position of extension, and very strong reflexes, in whom slight stimulation of the skin of the leg provoked bilateral extension of the toes; while pinching of the thigh caused adduction of the two limbs, with a movement of retreat of the stimulated one. The flexion of leg and thigh was incomplete, and could be obtained only by very strong stimulation. A patient of A. Thomas presented first an elongation of the limb (plantar flexion of the toes and extension of the leg on the thigh) on stimulation of the outer surface of the thigh in the middle third; this movement was barely carried out when it was succeeded by one of shortening or flexion. P. Marie and Foix think that from the distal to the proximal portion of the limb, stimulation produces reflex movements which vary according to the level of the segment excited. Symmetrical stimuli do not always produce the same reactions in the two corresponding limbs; and we can readily conceive that they may not behave in the same way, inasmuch as the central alterations are not always equal, and of the same nature, on both sides.

Another curious manifestation is the production of centro-lateral phenomena. As a rule, stimulation of a limb produces in the opposite one an outline of a movement of defence, as in extension of the toe and flexion of the foot; in some very slight cases, I have seen stimulation of the right side produce extension of the toe on the left side only. In A. Thomas's patient, pricking of the left leg provoked extension of the toe and retreat of the limb, on the left; while on the right side was seen plantar flexion of the toes, followed by extension of the foot on the leg. The inverse result followed stimulation of the right leg. Pierre Marie and Foix admit that, in some cases of paraplegia, forced flexion of the toes of one side causes retreat of the limb; while it provokes extension of the other limb when the stimulus is sustained.

Such are the principal forms in which the so-called reflexes of defence manifest themselves. We shall examine in further detail the very numerous varieties reported. It is equally impossible to linger over the relations which these may present in regard to the phenomena of sensibility. In cases of Brown-Sequard's syndrome, Babinski, Jarowski and Jumenti, and H. Claude have seen the defensive reflexes more pronounced on the anæsthetic side; Guillain has observed the reverse; Brown-Sequard, in his experiments of unilateral section of the spinal cord, observed an increase of the defensive phenomena on the opposite side—that is to say, in the anæsthetic limbs. Vulpian found the reverse results. The question cannot be definitely resolved. It seems to us, however, that the defensive phenomena are found in the great majority of subjects presenting any troubles of sensation, whether superficial or deep. They are more rare in individuals affected with spastic paralysis of the purely motor form, belonging to the clinical type of spasmodic tabes. In cases of total anæsthesia, such as found in total transverse sections of the dorsal cord (case noted by Dejerine and Levi-Valensi), those defensive reflexes are readily obtained.

Certain factors, still imperfectly known, should, nevertheless, have an influence on the intensity and evolution of those reflex phenomena. In conjunction with my intern, M. Rouillard, I have reported the case of a young man affected with Pott's disease, of acute evolution. From the fifth day, when the symptoms indicated but slight medullary compression (weakness of the legs, exaggeration of the tendon reflexes), we provoked defensive reflex movements in the lower limbs, from below a line corresponding to the sixth dorsal segment, while there was as yet no trouble of the objective sensibility. In the sequel we found the upper limit of the region in which the phenomena of defence could be provoked descend progressively till arrested at the foot; while, inversely, the domain of troubles of objective sensibility ascended gradually till it reached the level of the umbilicus.

In some cases of hemiplegia, I have seen the defensive phenomena (reflex hyperkinesis) diminish little by little in intensity, and disappear completely as the aggravation of the general symptoms indicated the extension of the lesions—a clinical fact common enough in hæmorrhages and softenings. I have noted the existence of those reflexes of defence in patients presenting the syndrome of intracranial hypertension. And it is common, too, to see them disappear as the pressure of the cephalo-rachidian fluid (measured by the manometer) gradually subsides. In one of my patients, who presented symptoms of serous accumulation in the cerebellar region, and displayed in the highest degree generalised defensive reflexes all over the limbs and trunk, those symptoms gradually disappeared with the progress of the cure which followed a decompressive operation of trepanning.

We cannot here insist on the value of the theories that have been advanced in explanation of the physiological mechanism of those movements, of which the most prominent characteristic is that of being completely removed from the influence of the will. Thus it is agreed that we admit having to deal here with a manifestation of medullary automatism. The reflectivity of the cord is exaggerated whenever its connections with the encephalon are rendered precarious or completely cut off. But, in order to explain the very special characteristics of the movements so generated, it must be admitted that the peripheral stimulation always calls into play centres of which the function is to produce movements that tend to secure the defence of the injured regions (Van Deen's "sensibility of reflexion"). It is the conception championed by Vulpian, and which appears to be the most satisfying; when we remember that, in the great majority of cases, those various involuntary movements of the upper or lower limbs are movements of flexion which tend to remove the region so irritated from the position of the stimulus, and to bring the limbs into contact with the body. This attitude of being rolled up—is it not that of the individual deprived of power to resist, who thus folds himself up? Thus is justified the use of the designation of *reflexes of defence*, by which those involuntary movements are now generally known. Pierre Marie and Foix, relying on the experiments of Sherrington and Philipson on a dog whose cervical cord had been divided (spinal dog), have proposed another explanation of those movements: they represent collectively a series of co-ordinate automatic complex actions, which "indicate the inhibition of some muscular groups and the stimulation of some others. They represent the spontaneous movements of liberated medullary automatism; and correspond to the more habitual expression of this automatism, the automatism of walking." This theory, brilliantly delineated, is very seductive; and, if demonstrable, would justify abolition of the term *reflexes of defence*—which has, indeed, so far as regards the retreating movement of the limb, been replaced by MM. Marie and Foix with that of the phenomenon of the abbreviators. But, as A. Thomas remarks, those flexion movements are often associated with those of adduction or abduction, which are no part of the mechanism of walking: they may be also elicited by stimuli originating in the viscera or mucous membranes, a fact which by no means accords with the hypothesis of a peripheral stimulus which solicits the limbs to a display of their walking function. Finally, what explanation would such view of the movements of the lower limbs give of those of the upper ones: forcible flexion of the hand on the forearm, and flexion of the forearm on the arm; with forcible pronation and slight abduction of the arm?

We are accordingly of the opinion that it is necessary only to consider that those involuntary or defensive movements are manifested in all cases in which, as the result of irritation or lesion of the pyramidal tract, the medullary centres are cut off from the integral influence of the brain; but it seems also necessary that there should exist, on the sensory section of the reflex arc, an alteration of some kind to facilitate the genesis of the phenomenon. It now remains for us to pass in review the nervous diseases in which examination of these reflexes may prove useful to the clinician either from the point of view of diagnosis or prognosis. The defensive reflexes have been noted in hemiplegia; but only in those cases in which the hemiplegia was originally incomplete, or in the transitory complete hemiplegias which are not the result of a destructive lesion dividing the fibres of the pyramidal tract. They are absent, even from the outset, when extensive foci of hæmorrhage or of cerebral softening have produced a more or less complete paralysis. They are observable, however, in cases in which focal lesions incompletely destructive, or juxta-pyramidal ones, occupy a position near the motor zone; which is, accordingly, merely compressed or œdematous. For the same reason, they belong to the symptomatology of paralysis resulting from cerebral or meningeal œdema: produced by ventricular distension, by meningitis, or by meningeal hæmorrhage. In a word, they have the characteristics of incomplete alterations of the pyramidal tract. In a later stage, after the period of repair, these defensive phenomena present themselves in certain spasmodic hemiplegias; but they have no longer the prognostic significance which they present in case of an individual struck down but a few hours before, and displaying a complete, but flabby paralysis; when their existence furnishes some grounds for the formulation of a favourable prognosis.

As already pointed out, the defensive reflexes form a part of the syndrome of intracranial hypertension. They are generalised then, and found in the upper limbs as well as lower. However, in the absence of signs of localisation, exaggeration of the reflexes of one side would favour a diagnosis of irritation of the pyramidal tract of that side. Their progressive and permanent disappearance after decompressive craniotomy would suggest a serious meningitis rather than a cerebral tumour, and thus contribute to a favourable prognosis. In the true forms of meningitis, which are always accompanied by considerable increase of the pressure of the cerebro-spinal fluid, the defensive reflexes are but slightly developed. They disappear with the onset of the terminal comatose period; on the other hand, in cases which proceed to recovery, they persist long during the convalescence.

In neoplastic lesions of the bulb and mesocephalon, it is possible to observe defensive reflexes, but it is more especially in cases of compression of the spinal cord, in transverse lesions, limited or diffuse (spinal syphilis, disseminated sclerosis), that we have noticed them in greatest frequency. They seem to be more rarely present in the combined scleroses, the lateral amyotrophic cases. They are absent in limited lesions of the grey matter of the cord, or of the posterior columns; and, *a fortiori*, in those of the nerve-roots. In those cases, the defensive phenomena express suppression, degeneration, or irritation of the pyramidal tract.

Thus we see that examination of the reflexes of defence—a precarious phenomenon—contemporary with the earliest symptoms of alteration of the pyramidal system, can give very valuable indications from the standpoints of diagnosis and prognosis; and we are able to understand that the presence of those signs, in addition to other characteristics derived from the study of the cutaneous and tendinous reflexes may be of great help in embarrassing cases.

Do those reflexes specially characterise certain forms of paraplegia? M. Babinsky, in discussing the features of one of the forms of paraplegia—paraplegia with flexion—has insisted on the importance of the reflexes of defence in this variety; in which failure and final disappearance of the tendon reflexes are observed. In a case published in 1909, and figured in our article in the *Précis de Pathologie générale*, Jean Camus and myself were equally struck by the intensity of the defensive reflexes; and that was one reason for cancelling the diagnosis of hysterical contracture, even in presence of the most characteristic symptoms of that neurosis. Since that date we have observed defensive reflexes in a great number of paraplegic cases, and it does not seem to us desirable to institute a distinction, from the standpoint of the *régime* of reflexes, between the paraplegias in which flexion predominates, or "cutaneo-reflex" (Babinsky), and those in which extension predominates, or "tendino-reflex."

The presence of defensive reflexes appears to be of the highest importance in the determination of the exact seat of a medullary lesion. Brown-Sequard and Vulpian had already insisted on the abolition of reflexes of every order, when the lesion had destroyed the lumbar enlargement of the cord. More recently, P. Marie and Foix have drawn attention to the localising value of a modification of the automatic medullary reflexes. Finally, Babinski and Jaworski have endeavoured to establish the following law: in cases of limited compression of the cord, the superior limit of the compression corresponds to the superior limit of the anæsthesia, while the inferior limit is indicated by the level at which the defensive reflexes cease to be obtainable; that is to say, for example, that if a tumour compresses the cord at the level of the second or third dorsal segment, the anæsthesia which involves the whole surface of the lower part of the body ends on the thoracic surface at a plane which corresponds to the second root-segment; while the defensive phenomena cannot be elicited by pinching of the skin, but below the plane corresponding to the third root-segment. If the space between the surface lines of limitation is of large dimensional area, there is reason for believing that there is compression over a considerable extent, such as is produced by pachymeningitis or extra-dural tumour. This opinion has, up to the present, been confirmed in one case only. In the anatomo-clinical fact which I described in conjunction with M. Rouillard, the seat of the very circumscribed tuberculoma did not correspond to these indications; as the zone of reflex phenomena of defence began to be developed above the actual seat of the tumour, and gradually descended. On the other hand, the data furnished by the upper limit of the anæsthesia permit a more exact localisation. It is true that, in tuberculous lesions, and indeed in those produced by other tumours, the phenomena of compression may be exaggerated by the presence of superadded meningo-medullary inflammatory complications, transgressing the limiting planes of the upper and lower extremities of the tumour. Thus we see that the diagnosis of the actual position and extent of medullary lesions will always be a matter of subtle delicacy; and it is well to know that, among the numerous suggestions deducible from the study of defensive reflexes, the sign proposed by MM. Babinski and Jaworski, if experience confirm its value, may become one of a certain degree of importance for the clinical observer.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by D. Souligoux, M.D., Surgeon to the Tenon Hospital, Paris. Subject: "The Treatment of Wounds of the Chest."*

THE Local Government Board has given its approval to the scheme for the establishment of a tuberculosis dispensary at the Brompton Hospital for Consumption in connection with the boroughs of Chelsea and Kensington. This is a tentative arrangement for six months.

ORIGINAL PAPERS.

PERIODS OF STRESS IN HUMAN DEVELOPMENT. (a)

By EUGENE S. TALBOT, M.D.,
Chicago, Illinois.

The embryonic history of man is essentially the same as that of the invertebrates as well as the lower vertebrates. The differentiation lies in the development of some structures and the sacrifice of others for the benefit of the organism as a whole. There is an economy of growth governing the relations of the organs to each other. Development of the organism involves changes in which certain parts cease to advance after certain periods, while others assume a relatively greater importance. Some of the functions, possessed at the beginning by certain cells, are lost and the cells develop in one direction only. While these changes fit the cells to perform their specific purposes in the organism, they create a loss of power and independent existence and are, in this respect, expressions of excessive or arrested development, either of which constitutes degeneration.

Certain organs, well developed in early life, undergo arrest of development, degenerate as the organism advances, cease to grow or disappear. The organism as a whole is limited in its period of growth, and having reached a certain stage ceases to increase in size and remains practically stationary throughout life. Growth of the organism is regulated by the activity of certain ductless glands, among them the pituitary gland. An organ may check or stimulate growth, but when it fails pathologic conditions result in the organism of excessive or arrested development.

In the process of man's development from the primitive cell, periods occur in which unfavourable influences act so as to occasion a stress or struggle. These are called periods of stress. A stress period is so-called because a new function disturbs the physiologic balance previously existing. Examples are the onset of menstruation in the girl and its disappearance in the woman. The stress may act on the organism as a whole or on a particular part, and if it is upon the organism the organs least able to bear it show its effects most clearly. Thus, partly developed organs, the functions of which are as yet imperfectly established, are likely to be checked entirely in their development or take abnormal courses. The organs of greatest importance may secure nourishment and nervous force at the expense of others, bringing to bear a struggle for existence among the different organs. If the stress falls on one part local changes may result in arrested or excessive development—namely, in degeneration of the particular organ. The changes will be more marked if the stress period occurs during the plastic state of the affected organ, yet under such conditions reparative changes are apt to be correspondingly active.

Degenerative Influences.

Three kinds of unfavourable influences affect the organism or its parts—the mechanic, toxic and nutritive.

Mechanic influences are frequently operative in the direction of the development of some organs. The weight of the body may operate in infants and produce deformities like bow-legs. Mechanic influences are often very effective in changing the shape of the jaws and teeth. An influence, ordinarily insufficient to produce an abnormality, may do so at a period when it is favoured by weakness of the organ from other causes.

The germs of disease may be inherited or the general nutrition of the fœtus may be checked in development so that the child inherits a tendency to disease. Through the check in the fœtal stage, the power of the white blood cells to devour fœtal structures is lost and the organs which should protect against disease by forming antitoxins fail to perform their functions. For this reason, in the degenerate, many infections and contagions assume their early destructive types. The influence of such checks in the parent is shown in the bony maldevelopment, illustrated in animals by Charrin and Gley, and in man by Coolidge. The facial bones, jaws, and teeth are often thus affected. While the effect of the disease upon the parent is only temporary, the development of the child may be hindered in its higher tendencies. Mothers have borne moral imbeciles, epileptics or lunatics after a pregnancy during which they were attacked by a contagious disease, and the children of previous or subsequent pregnancies were normal. The children of pregnancies previous to the one complicated by the contagious disease or toxic elements may be healthy, while those of subsequent pregnancies are defective. Any contagious or infectious disease may not interfere temporarily with bodily strength, but may produce a complete change in the parent's system even affecting the mental powers.

Nutritive influences, the most commonly noted, are manifested in two directions: either in an excess of nutrititive material, which, when the proper conditions are present, leads to excessive development of the affected parts, or in conditions unfavourable to nutrition, an arrested development occurs. These unfavourable conditions are, lack of nutritive material, lack of proper assimilation, and lack of proper nervous influences to stimulate and control nutrition.

The periods of stress occurring during development are called periods of evolution and those occurring during maturity are called periods of involution. Arrests or excesses occurring at any period during development underlie all so-called deformities of the body. There are often reversions in which the features of the adult fish, reptile, bird and mammal characteristic of the fœtal stages through which man passes, are reproduced. The structures most prone to such degenerations are the head, face, nose, jaws and teeth, since these features are still in process of evolution and they are peculiarly susceptible to the law of economy of growth in the struggle for existence among organs. This struggle among organs takes place in animals as well as in man. Wild animals in captivity, and others through domestication (change of environment and food), present evolution in structure similar to that of man. Structures undergoing degeneration are, because of greater or lessened blood supply, more liable to disease than those more highly evolved. Marked illustrations of this may be found in irregularities of the teeth out of harmony in jaw development where the teeth are not being lost fast enough for the receding jaws, in interstitial gingivitis, and in excesses and arrests of development of the structures of the nose and sinuses.

Struggles for existence on the part of the different organs and systems are most ardent during periods of evolution and involution. During development *in utero*, or during the first dentition, or during the second dentition (often as late as the thirteenth year), or during puberty and adolescence (fourteen to twenty-five), or during the climacteric (forty to sixty), when uterine involution occurs in women and prostatic involution in men, or finally during senility (about sixty and upwards), mental or physical defects may show, a congenital tendency to which has remained latent until this period of stress. When systemic balance, the rational attendant of evolution, is disturbed by a change in environment, the organs do not pursue their normal growth. Such disturbances are most apt to exist during periods of stress because of the varying relations of different organs.

The first intra-uterine period of stress occurs within the early third of embryonic life, when the embryo rapidly passes through the stages which correspond to the adult fish, reptile, bird, and mammal types and assumes the form of the human being. In this period are the most marked deformities and monstrosities which often result in the death of the fœtus. Such disturbances in development are likely to affect most powerfully the structures in which evolution is variable. Their influence must strongly affect nutrition of the dermal bone elements of the skull, face, nose, and jaws, and hence must affect the teeth, although the results are not always obvious until the later periods of stress.

(a) Paper read at the Section of Stomatology, International Congress of Medicine, London, July, 1913.

A check on or an excess of the growth of the higher organs of the nervous system frequently results in impairment of the mental faculties to the extent that any of the degenerations may occur. In these cases, the brain remains in the stage characteristic of the common simian ancestor, or the higher faculties may attain only the development of primitive races in whom emotional control and ethical ideas are insufficient to meet the exigencies of civilised states. Together with, and dependent on, this cerebral mal-development, are deformities of all the structures, including the head, face, nose, jaws, and teeth.

In the latter part of intra-uterine life, imperfect development of the nervous system may be accompanied by a premature growth of the teeth so that they erupt before or at birth. Prenatal or congenital teeth often accompany imperfect dvelopment of other organs. The intra-uterine development of man and ape is so similar that they congenitally resemble each other more closely than do the developed adults. The fœtus of the ape resembles an adult more than the adult ape resembles the adult man. In extra-uterine development a marked contrast exists. The ape passes through a short infancy to a condition from which there is no further development.

Periods of stress are furnished by the different periods of embryonic as well as by those of extra-uterine development. Even sex is determined by conditions of stress after a certain period. Poor maternal nutrition will determine an excess of males while good will determine an excess of females. Arrests at some periods of intra-uterine life will produce prematurely senile states, since there is a period of intra-uterine life wherein the fœtus wavers betreen the senile appearance of adult anthropoid apes and that of mankind in youth. This intra-uterine stress may be an expression of the general nervous exhaustion of the mother, which first affecting the check influences of the central nervous system, finally leads to unchecked excessive functioning on the part of the local nervous systems. In consequence, the mother is unable to manufacture proper elements of nutrition or to properly excrete waste material. The fœtus, therefore, starved and poisoned, fails to pass through the periods of stress in a complete, well-balanced manner. The stress acts most strongly on those structures which are transitory and variable in type. A strong influence may be exerted on the fœtus, mentally or otherwise, by stress in the mother. The human fœtus exhibits very decided reaction to sensory impressions of the mother.

The fœtal periods of stress in the human organism deserving most attention are those coming at sex differentiation and the senile or simian period of intra-uterine life, usually about four and one-half months after conception. Three conditions, infantilism, masculinism, and femininism, and occasionally a mixed state, result from arrest of development before, during, and after sex differentiation in intra-uterine life. As sex organs and sex nerves are differentiated before the sexual appetite appears, the mental side of sex can be determined only in extra-uterine life. The three conditions are practically all arrested development of the promise of the child type. As the female type most nearly approximates, from the view-point of bodily and nervous development, the promise of the child type, checks or excesses in its deveopment result in masculinism. In the first instance the female has proceeded so far in development as to have female organs and their functions while retaining traces of the lower male type. In another instance the male has proceeded along the line of evolution towards the female type, but before sex has been fully differentiated further development is checked and the male type is finally assumed as the predominant one. Both sexes proceed from an indifferent type, which resembles the hermaphroditic found in the lower animals. Arrest of development takes place at any point in the embryogeny. Arrest at periods of stress through any process which retards development, peculiarly influences the development of the child after birth. When due to syphilitic conditions, which exert a severe strain, the child readily succumbs to the infections and contagions. It also produces early senile stress in the child, so important as regards the head, face, nose, jaws and teeth. Forces exerted during the senile period of stress play a large part in determining precocity and its product, premature senility with osseous deformity and other consequences. Neurasthenia in the parent may result in bony arrest or excess of development such as is shown in macrocephalic and micro-cephalic heads. The head, facial bones, nose, jaws, and teeth are peculiarly affected by disease.

The power of passing through the fœtal periods of stress depends on the condition of the fœtal organs at the time of the periods of stress, and partly on inherited factors, and partly on maternal conditions. Defect in any of these conditions at this period of stress may so affect the struggle for existence that reversionary conditions gain the ascendancy. This is noted in cyclopia, in which the pineal body becomes an actual eye as in certain lizards, while the paired embryonic eyes in man disappear. Stress also at other periods causes arrested brain types in idiots at the stages resembling the brains of Sauropsidæ (bird and reptilian types).

Extra-uterine Periods of Stress.

During the entire developmental life of man, extending over the first thirty years, there are marked changes in the nervous system and associated organs. There is constant demand on the powers of nutrition. There are produced what may be called the post-natal periods of stress. The first period of infancy is comparatively uniform and extends to the eruption of the temporary teeth, which marks the beginning of the post-natal or second period of stress. During this period of infancy disturbances are seldom met with if the infant is properly protected. The food is introduced in a practically sterile condition from the mother's breast. In the absence of infections the respiratory and circulatory organs act normally, and growth is uninterrupted after the first normal decrease in weight. This second period of stress involves a series of changes which occupies the time from six months to two years after birth, and which are almost as remarkable as the changes occurring in the early weeks of intra-uterine gestation. At this time the digestive organs assume more complex functions; teeth prepare the solid food; the intestinal canal becomes accustomed to the presence of normal micro-organisms and prepared to resist the invasion of injurious germs; urination and defæcation become subject to voluntary control and restraints of decency; power to stand upright and to walk is attained; the faculty of speech is developed, and at this period deformities of the head, face, nose, jaws, and teeth are seen.

The second dentition, beginning with the sixth year, forms the third period of stress. At this time deformities of the head, face, nose, jaws, and teeth are more noticeable. The fourth period is ushered in by puberty, at which time the generative organs begin to be functionally active; marked changes are made in the brain and nervous system; the osseous system reaches its complete development at the close of adolescence, and the organism assumes a stable condition which it maintains without apparent change throughout adult life. The climacteric period, marked in women about the fifth decade and the failure of the sexual powers in man somewhat later, necessitates readjustments of metabolism of great importance to all organs, and notes the fifth period of stress.

Owing to the struggle for existence which occurs at puberty between the old type of the chondrocranium and its new type as supplemented by the dermal bones, the nervous system may take a distorted ply and arrest the physical and mental development so that body and face remain at the childish point; or the physical development may be checked, or the nervous system of certain organs may be checked while the body goes on to full development. Not infrequently the face is arrested at any period from birth to puberty. Hence many persons retain a youthful appearance throughout life.

The last period is that of decadence and senility, in which the unity or the organism is indicated, not by the preservation of all the organs in full vigour, but by the economy with which the failing resources are applied to the maintenance of vitally necessary organs to the detriment of those whose functions are less essential. In this period the teeth are liable to soften and to be lost as a result of interstitial gingivitis and are not replaced; the jaw atrophies and similar changes take place in other parts of the body. It is difficult to distinguish the effects of the failing nutritive powers from the effects of disease. If man were protected from the inroads of disease, which materially modify the natural process, he would degenerate and die in a different manner from the most commonly noted. Premature senility may evince itself in atheroma of the arteries at the periods of extra-uterine stress, an observation of which may be made in the children of vegetarians and in persons who have had fevers.

Since the importance of periods of stress in the development of the human fœtus has been pointed out, the greatest care and protection as well as careful study should be given to parent and child that degenerative influences may not lessen the chances of survival nor aid in furthering the degenerative tendencies of the human race.

CIRCUMCISION: THE ADVANTAGES OF A MODIFIED OPERATION. (a)

By THOMAS H. KELLOCK, M.D., M.C.Cantab., F.R.C.S.Eng.,

Surgeon to and Lecturer on Surgery at Middlesex Hospital, Surgeon to the Hospital for Sick Children, Great Ormond Street.

Mr. President and Gentlemen,—It may be that I should apologise for occupying your time with a subject that would seem to be of so little importance or interest as the operation of circumcision: it is such an ancient one, and so almost consecrated by antiquity, that to attack or criticise it may seem to savour of vandalism.

Still, sentiment and its antiquity should not excuse it if we feel that the mutilation of children by its performance is unnecessary or harmful.

It is not my intention to trace the history of the operation, or to attempt to unravel the mystery that surrounds its origin, but rather to inquire into the necessity for its very frequent performance in the present day, and to try and show that most, at any rate, of the advantages claimed for it may be attained by very much milder measures.

It is quite easy to say that a boy or man is none the worse for having been circumcised in infancy or childhood; but is this so, and are there no objections to the operation as generally performed, with complete removal of the prepuce and permanent exposure of the glans penis? The prepuce is the natural covering of the glans penis, protects it from irritation or injury, and preserves its sensory faculties. Denuded of this covering, the epithelium covering the glans becomes hard and less sensitive, and, although procreative power would not seem to be lessened, I think it is certain that the natural desire is modified, and ceases at an earlier age than in the case of the uncircumcised.

This is, perhaps, not the place to discuss the dangers of the actual operation, but everyone will allow that such do exist, and the roll of children who have lost their lives or suffered severely from the operation must be a long one. Sepsis, hæmorrhage, and such like have been answerable for a large number of what may almost be termed unnecessary deaths; whilst hæmophilia has frequently been brought to light, as it were, by this the first surgical experience of the infant. I would not contend that these dangers are very great ones, or that they are altogether absent from the milder operation I advocate; still they are present, and weigh against the performance of any operation unless it be really necessary.

Of all the conditions for which circumcision is advised probably the most frequent is difficulty of micturition, pain during the act, and all the ills which rightly or wrongly have been attributed to the dysuria. In such cases I believe circumcision is quite unnecessary. The difficulty in micturition is very often caused by a partial blocking of the urinary meatus by preputial adhesions immediately round it. The prepuce is normally adherent to the glans penis, and there is no reason why under ordinary circumstances it should not be allowed to remain so. If the closeness of the adhesion to the orifice of the urethra partially blocks this it can quite easily be separated just around it, and the dysuria, if caused in this way, relieved.

What I think is far more frequently a real cause of dysuria is a small pin-hole orifice to the urethra, which is often present when phimosis exists. I find quite a number of boys sent into hospital on account of inguinal hernia who have this condition. They have almost invariably been circumcised, but the pin-hole meatus, which is sometimes not large enough to admit a probe, has been left untouched. The remedying of this is a very simple matter, and is, I think, a point that should always be attended to at the time of the circumcision if this be done, or instead of it. Where, as is often the case when the prepuce is much adherent, the preputial orifice is small and will not allow easy retraction, and the prepuce is not unduly long, circumcision is not thereby rendered necessary, for a small incision on the dorsum and one suture is all that is necessary to allow of quite easy retraction.

When inflammation or suppuration occur under the prepuce it is a very common practice to perform circumcision; but here, again, all that is really necessary, provided the prepuce is not unduly long, is a small incision on the dorsum. These dorsal incisions for tight prepuce are often made much too freely, so much so that the slit prepuce hangs down on either side in unsightly folds; all that is usually required is one about a quarter of an inch in length, including, of course, both skin and mucous membrane.

If the conditions I have mentioned be complicated by an unduly long prepuce, or if the latter exist alone, it is often necessary to remove some of it before the other conditions can be properly dealt with; and it is here that I would advocate an operation considerably modified from that generally performed.

A very long prepuce may be said to be abnormal, but there would seem to be no reason why, in attempting to remedy it, we should go to the other extreme and create an abnormality in the other direction. Our object should be rather to convert the abnormal prepuce into a normal one—one that will come forward over the glans penis and protect it.

There would seem to have been some difficulty in obtaining this result, and it is generally supposed that if it be attempted cicatricial contraction will take place round the new orifice, and the last state of the child be worse than the first. It is, however, quite a simple matter if we only get away from the idea that the mucous membrane must be cut or trimmed off close to its attachment to the corona. Of course, if this be done, there is no possibility of the prepuce ever being able to come forward over the glans.

(a) Paper read at the Medical Society of London, December 8th, 1913.

The operation I advocate consists in the removal of only that portion of the prepuce that is redundant. After separating any adhesions there may be round the urethral opening, the prepuce that projects beyond the tip of the glans penis is cut off in slightly slanting direction parallel with the line of the corona; both the skin and mucous membrane are divided at the same level, and no more of the latter than of the former is removed. Then a small incision, including both skin and mucous membrane, about an eighth of an inch long, is made on the dorsum, which converts the round opening into a slightly pear-shaped one. The hæmorrhage is generally insignificant, and seldom calls for the use of artery forceps. In quite young babies this is all that is needed; in older children I generally put in four horsehair sutures. uniting the cut edges of skin and mucous membrane, tying them very tightly so that they drop out by themselves after four or five days, so obviating the necessity of their removal, which is a performance painful to the child and irritating to the mother or nurse. If the patient be under an anæsthetic, a little tincture of iodine may be painted over the wound, but no application or dressing at all seems as good treatment as any. The dressing of a circumcision is as unnecessary as it is painful to the child; they do much better without any. A small apron of gutta-percha tissue will prevent the diaper sticking to the wound, and more rapid healing takes place in this way than with any form of dressing.

The prepuce left in this way should be sufficient to just cover over the glans penis and leave the urethral orifice visible. It can be retracted once a day by the nurse for a week or so, and a drop or two of oil or a little soft vaseline placed on the glans will prevent it becoming sufficiently adherent to the prepuce to make retraction painful.

[I have been using the term mucous membrane to indicate the soft skin which lines the inside of the prepuce. Although, of course, it is an erroneous one, yet it is in common use, and serves a very useful purpose in a description of any operation to distinguish it from the skin covering the outside.]

There are other reasons given for performing the operation. Circumcision is said to prevent the infection with venereal diseases later in life, and there is no doubt but that the incidence of hard and soft chancres is less common in the circumcised than in the uncircumcised. It is quite obvious that the man who has a long prepuce that retracts with difficulty is liable during coitus to sustain cracks or fissures into which any virus may enter, a danger to which the circumcised, with a hard glans penis and no prepuce, is not so much exposed; and, if the sole object of the operation were the prevention of these diseases, it must be allowed that the complete operation is good and answers the purpose. But is the operation often done with only this object; and is not the man who has a short prepuce almost, if not quite, as safe when exposed to infection as one completely circumcised?

Gonorrhœa I need hardly mention, for it is quite obvious that an urethral infection by the organisms of this disease is equally likely to occur whether a man has been circumcised or no. Circumcision is often performed in the hope that it will cure the habit of masturbation. I do not suppose one should say prevent the habit, for it is doubtful if it is ever done with that object. For a time immediately after the operation the tenderness of the part naturally puts a stop to the habit, and this tenderness is equally produced by the milder operation; but whether this result is a lasting one is, I think, doubtful. I cannot claim to have had to deal with any large number of these cases, but I think the habit is almost as common amongst those who have been circumcised in infancy as in the uncircumcised, and so I do not think it can be claimed that either operation cures it. On the contrary, it is easy to suppose that the constant irritation of the clothes about an exposed glans penis might well originate it.

Mere sentiment on the part of the father is often a reason why babies are circumcised. One often hears a man say, "I have had every one of my boys circumcised," but will give no better reason than that he thinks they will be the better for it "later on." This is really no valid reason why the children should be unnecessarily mutilated, and generally means that the father has suffered from some venereal disease; and, if the real reason is his anxiety to protect the children from the same, the question is reduced to the one I have just mentioned—the prevention of venereal disease by the operation.

I am happy to say that one now meets with quite a number of boys for whom, by various surgeons, this modified operation has been performed with excellent results, and I hope to see it almost, if not completely, take the place of the old operation; and I shall be happy if what I have now said may convince any advocate of the old operation that equally good results may be obtained by the milder and more humane one.

RECENT WORK ON THE ÆTIOLOGY OF GALL-STONES. (*a*)

By J. W. McNee, M.B., Ch.B.,
Extra Hon. Physician, Royal Hospital for Sick Children, Glasgow.

STATISTICS show that at least 10 per cent. of all adults are carriers of gall-stones. As to the influence of age and sex in their causation, Schwartz reported that out of 146 patients who had required treatment for cholelithiasis 69 per cent. were females and 31 per cent. males, the great majority of the former being between the ages of 20 and 40 years—*i.e.*, in the period of child-bearing: while Schroeder showed that in females who had borne children the figures were ten times greater than in those who had not.

The views of the ætiology of gall-stones which have been held for the last twenty years are those of Naunyn, who recognised two factors in the formation of all varieties of gall-stones, (1) stasis of the bile in the gall-bladder, and (2) inflammatory catarrh of the gall-bladder mucosa induced by micro-organisms. Naunyn held that in a condition of stasis in the gall-bladder the epithelial cells, dying as the result of inflammation of the gall-bladder, were shed off, and that the inspissated bile extracted the cholesterin from them for the building up of stones. The work of Aschoff and his pupils, now accepted practically throughout Germany, has shown that these views are incorrect. According to Aschoff, cholesterin is secreted by the liver itself, and the droplets of cholesterin found in the cells of the mucosa are simply absorbed secondarily from the inspissated bile. In the formation of gall-stones stasis is a most important factor, in that it permits the separating out of the constituents of gall-stones from the bile, and in two conditions in which the proclivity to gall-stone formation is well recognised—viz., the

---

(*a*) Full abstract of paper read before the Glasgow Medico-Chirurgical Society, November 28th, 1913.

pregnant state and general adiposity, there is likely to be considerable and continuous pressure on the gall-bladder, with stasis as the result. A second factor is the altered concentration of the constituents of the bile—*i.e.*, increase of the stone-forming elements. It is now known that the amount of cholesterin in the blood-serum is increased above the normal during pregnancy, especially in the later months, and in certain conditions of disease—*e.g.*, diabetes mellitus, arteriosclerosis, chronic Bright's disease, and many forms of jaundice; while the amount is below the normal in tuberculosis, tumours, and in all the acute fevers except enteric. By the Windaus digitonin method the normal amount of cholesterin in the bile has been ascertained to be about 1.5 to 1.7 grms. per litre; but the speaker, working in Aschoff's laboratory, found, in four cases of pregnancy which came to *post-mortem*, figures of 6.88, 7.20, 6.60 and 6.37 grms. per litre respectively, and in the case of a patient who died of acute phthisis within a month or two after delivery a figure of 12.5 grms. per litre.

Alteration in the amount of the pigment is of little consequence, but increase in the lime salts is of great importance. The third factor in the formation of gall-stones is infection by micro-organisms, most commonly of the typhoid-coli group. When this occurs the lime salts in the bile are increased partly from the serous exudate which exudes from the inflamed wall, and partly because in a chronically inflamed gall-bladder there is great new development of mucous glands, from which salts, chiefly carbonates of lime, are secreted with the mucin. Aschoff's work, however, has shown that there is a class of gall-stones, including about 20 per cent. of all stones, which have, at first, at least no inflammatory factor in their origin. These are the pure cholesterin stones, which occur always singly and in a gall-bladder whose contents are, as a rule, sterile. This stone arises by the separating out of cholesterin in a gall-bladder in which, in addition to the presence of considerable stasis, there is an excess of cholesterin in the bile. In section it is seen to be crystalline, the crystals being arranged somewhat irregularity in the centre and radiating out on all sides. It develops, as a rule, quite without clinical symptoms, and is often accidentally seen at *post-mortem.* If, further, the common bile duct becomes partly obstructed—*e.g.*, by a solitary cholesterin stone tending to block the neck of the gall-bladder, organisms readily pass up from the bowel and set up an inflammatory cholecystitis. When this occurs the character of the bile is immediately altered, lime salts being present in excess, and the cholesterin stone becomes coated with a mantle of chalk and cholesterin, darker in colour than the pure cholesterin, and deposited in concentric layers. Thus is formed the "combination-stone." The commonest type of stone is the facetted cholesterin-chalk, or cholesterin-chalk-pigment stone, which is always multiple and may be found in extraordinary numbers. These may arise either in a gall-bladder which has become infected with organisms and which contained no previous stone, or they may be formed in a gall-bladder where a stone of aseptic origin existed before the onset of inflammation. These stones are built up concentrically from the very centre and have no radiate structure. In 130 cases collected from *post-mortems* in his own laboratory Aschoff found in 6 per cent. pure cholesterin stones; in 20 per cent. combination stones (with or without other stones); in 63 per cent., multiple cholesterin-pigment-chalk stones, without any combination stone; in 10 per cent., other stones of varying kinds, including pigment-chalk stones, etc. Thus few cases of pure cholesterin stones are not followed subsequently by inflammatory changes; while 20 per cent. of all cases of inflammatory cholelithiasis pass through a non-inflammatory period.

It should be recognised that the presence of a gall-stone or of gall-stones is the symptom of a disease, not the disease *per se.* For the presence of a stone of aseptic origin the abnormal element lies in the composition of the bile; in the case of stones of inflammatory origin the pathological condition is the cholecystitis or catarrh of the gall-bladder. Therefore, any treatment, to be truly rational, must not only aim at removal of the gall-stones present, but must combat the stasis in the bladder by adequate drainage, must promote healing of the inflamed and often ulcerated gall-bladder wall, and must take cognisance of the conditions which tend to increase the excretion of cholesterin in the bile.

OPERATING THEATRES.

HAMPSTEAD HOSPITAL.

Three Cases of Colectomy.—Mr. Jackson Clarke operated on two cases in which he did partial colectomy with end-in-side implantation of the divided ileum into the pelvic colon.

Case 1.—A woman, æt. 24. She had had appendix removed, but this was followed by local pain. The abdomen was re-opened and one broad, dense adhesion divided and sewn over. The patient was better for a time, but the pain returned. She was re-admitted, and very extensive adhesions were found all over the ascending colon. The latter, with half the transverse colon, was removed, and the ileum implanted into the upper part of the iliac colon. The patient recovered without a bad symptom, being out of bed on the 15th day.

Case 2.—A woman, who gave a history of years of abdominal pain. In June, 1911, she had had appendix out at St. Thomas's. At a first operation at Hampstead Hospital on July 17th, 1913, right nephropexy was done and removal of a thyroid adenoma. There was no relief of the pain. The second operation was on August 6th, 1913. Many adhesions were found; one held the stomach close to right iliac fossa. The cæcum and ascending colon were also covered with adhesions and some large caseous glands were seen in the mesentery; the latter were removed, together with the same parts as in Case 1. There was much shock and some vomiting, which last was most likely due to denudation of the third part of the duodenum. The patient made a good recovery.

Case 3.—This was that of a female, æt. 25, with the following history: Six days' pain in right iliac fossa; nausea; no vomiting; bowels costive. The patient had had three previous attacks, two about five years before and one a month previously. On examination, there was good movement; no distension; tenderness, resistance and a small mass in right iliac fossa; temperature, 100.2°; pulse, 100. At the operation, which was performed on admission (C.E.—ether), Battle's incision was made. The appendix, which was lengthy and had thickened walls, was found to be bound down by a large number of old, dense adhesions to coils of small intestine; removal was done, and the adhesions ligatured and removed. Rectal saline with sanatogen were given. The wound healed by first intention. The patient complained of pain in right iliac fossa on 16th day, and again, with vomiting, on 19th day. Great trouble was experienced in opening the bowels. Patient was discharged January 17th, 1913. She was readmitted on February 17th, 1913, with a history of 14 days' continuous pain in right iliac fossa; vomiting on two or three occasions; marked constipation. There was tenderness all over right iliac fossa; no distension, rigidity or mass. Temperature, 99°; pulse, 88. At the operation on February 19th (C.E.—ether) a median subumbilical incision was made. The upper part of the small intestine was found slightly distended. A long, thick and very tough adhesion, two and a half inches in width, was found passing from the outer side of the cæcum to the peritoneal aspect of the scar. A large number of small adhesions were found. The adhesions were ligatured and excised. Rectal saline was given. There was a small patch of pleurisy in the left side of chest. The patient complained of pain in right iliac fossa after third day. The wound healed by first intention. Patient refused operation for short-circuiting, and still complained of some pain on discharge on March 15th, 1913.

Mr. Jackson commented on the large number of cases of appendicectomy in which adhesions formed after the operation.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

CLINICAL SECTION.

MEETING HELD FRIDAY, DECEMBER 12TH, 1913.

The President, MR. CHARTERS J. SYMONDS, in the Chair.

EXHIBITION OF CLINICAL CASES.

DR. F. PARKES WEBER showed a case of chronic myelocytic leukæmia treated by benzol, etc. The patient, æt. 59, was admitted to hospital under Dr Parkes Weber in August, 1913. The spleen was hard and greatly enlarged, bulging forward and reaching downwards into the pelvis. The liver was also enlarged, the lower edge being three finger-breadths below the costal margin in the right nipple-line. The superficial lymphatic glands appeared unaffected, excepting for slight swelling of those in the groins. The blood-picture was typical of myelocytic leukæmia. The teeth and gums were in an unhealthy condition. The stomach contents after a test-breakfast were found to contain no free hydrochloric acid. In the hospital the patient did not seem acutely ill, though he was weak. Brachial systolic blood-pressure, 110 mm. Hg. Dr. R. Gruber made an ophthalmoscopic examination and reported that the fundi were normal. The Wassermann reaction for syphilis and Pirquet's anti-reaction for tuberculosis were both negative. There was often slight evening pyrexia (about 100° F.) in the hospital until September 29th, but since then there had been none. As he had already been treated by Röntgen rays in another hospital, it was decided to make a trial of benzol-therapy, introduced by A. von Korányi and G. Kiralyfi, of Budapest, in 1912. In the present case gelatine capsules were employed, each containing a mixture of 0.5 grm. benzol and 0.5 grm. pure olive oil. In this form the patient was given 0.5 grm benzol three times daily from August 15th to August 23rd; from August 23rd to September 2nd the same dose five times daily; from September 2nd to September 16th 1 grm. three times daily; from September 16th to October 20th 1 grm. four times daily. The benzol treatment was then discontinued, as it had led neither to decided objective nor to subjective improvement, and Röntgen-ray treatment under Dr. Jas. Metcalfe was immediately commenced. Since then the spleen had obviously greatly diminished in bulk and the quality of the blood had improved. On August 14th (before the commencement of the benzol-therapy) the blood-examination gave: Red cells, 3,400,000 in the cubic millimetre of blood; white cells, 130,000 (of which the polymorphonuclear neutrophiles constituted 45.2 per cent., and the myelocytes and myeoblasts 29.9 per cent.). On October 20th (when the benzol-therapy was discontinued) the blood examination gave: Red cells, 2,532,000; white cells, 219,000 of which the polymorphonuclear neutrophiles constituted 57.14 per cent., and the myelocytes and myeloblasts 25 per cent.). On December 2nd the blood examination gave: Red cells, 5,350,000; white cells, 76,200 (of which the polymorphonuclear neutrophiles constituted 55 per cent., and the myelocytes and myeloblasts 31 per cent. In addition to the treatment mentioned above, the patient, on August 25th, was given (by intramuscular injection) 20 c.c. of fresh defibrinated blood from a healthy man, but this had no obvious therapeutic effect of any kind.

MR. ARTHUR EVANS showed a case of suppression of urine in a boy, æt. 11, after operation for acute appendicitis, cured by double nephrotomy. The boy was admitted into hospital at 10 p.m. one day in August, 1913, and was operated upon on the same night for acute appendicitis. The tip of the appendix was acutely inflamed and contained pus, which, as the appendix was being delivered through the wound, burst through the appendix wall and was caught upon a gauze pad; the pus did not foul the peritoneal cavity. There was a little free fluid in the peritoneal cavity; a rubber drainage tube was inserted in the wound and reached to the site of the appendix; the rest of the wound was sewn up. As soon as the patient returned to the ward saline solution was administered per rectum. The next day the boy was sick twice. During the twenty-four hours eight pints of saline solution were given. On the third day ten pints of saline solution were given per rectum. No fresh abdominal signs manifested themselves; the drainage tube was removed and a gauze plug inserted. The patient had by this time received 2 gr. of calomel in ½-gr. doses, and the bowels were moved twice. On the fourth day the patient was quite comfortable and his bowels were moved twice; the temperature reached 100° F. in the middle of the day, the pulse was 86, and the respiration 34; in fact, the condition was perfectly satisfactory. On the fifth day, at 2 a.m., the patient complained of pain in the left loin and vomited three times. He was given three minims of oil of cajuput at 2 a.m. and one minim of tincture of iodine at 4 a.m. The pain became easier later in the morning. The feeds given consisted of lemonade, and milk with barley water; the boy was sick after each feed. At 11 a.m. the patient passed about 3 dr. of urine deeply stained with blood (the deposit obtained by centrifugalising showed blood and bacteria, both bacilli and streptococci; there were no casts.) On the sixth day the patient still had some pain, and it was now in both loins. His colour was not good and the pulse was weak. No urine had been passed since 11 a.m. the previous day, but now about 2 dr. were voided, looking like undiluted blood. This on being centrifugalised showed blood, pus, black pigment granules, oxalates, and a few large cocci; there were no casts. Hot fomentations to the loins had been continued since the day before. At 5 p.m. a hot pack was given, as vomiting was persistent. The boy seemed more comfortable until 7.30 p.m., when he had a convulsion, the face twitching and the eyes fixed; two pints of citric acid solution were given per rectum. At 8 p.m. the boy was unconscious and the pulse feeble: three pints of saline solution were given intravenously and two pints per rectum. A hot-air bath was given. The skin did not become moist. At 8.45 p.m. the pulse was only just perceptible. At 9.20 p.m. the patient was taken to the operating theatre, and Mr. Evans rapidly exposed both kidneys and freely laid them open, cutting through the substance of the kidney and exploring the pelvis in each case; no stone could be felt in either. Each kidney seemed much larger than normal, particularly the left, and each felt tenser than normal. From the left kidney he excised a small piece for microscopical purposes. Both kidneys bled profusely and both were plugged with gauze packing. As far as the gush of blood from the cut kidney would allow of an opinion, there was no urine in either pelvis. The patient was taken back to the ward, and at 9.45 p.m. 10 minims of brandy were given hypodermically and two pints of saline solution administered subcutaneously. The next day, at 12.15 a.m., the voluminous dressings had become sodden and needed packing; it was evident that urine as well as blood had soaked these first dressings. So profusely did fluid discharge from the kidney incisions that fresh packings were frequently necessary. The bladder was washed out at 11 a.m. The pulse was much stronger and the patient was quite comfortable; he did not vomit and there was no further convulsion. The patient made an uninterrupted recovery. Dr. R. G. Hebb, who had examined the portion of kidney removed at the time of the operation, reported that it was in a condition of "cloudy swelling." The urine had become normal, hence one might assume that the urine was normal before the attack of appendicitis, and so it was clear that in this case he had been dealing with an almost fatal attack of suppression of urine in a patient whose kidneys were previously normal.

Mr. T. H. **Kellock** showed four cases of malignant disease after treatment with radium. (1) A man, æt. 66, who was admitted to hospital in July, 1913. Six weeks previously he had first noticed an ulcer on the upper lip, caused, he thought, by a cigarette paper sticking to it; this had gradually increased in size, but had not caused him much pain. On admission the greater part of the upper lip was the seat of a hard-edged, rather deep ulcer, extending almost from one angle of the mouth to the other and into the mucous membrane nearly to the junction of the lip and alveolar margin of the jaw. Its hard, everted edge was clearly seen on the outside of the lip. There were no palpably enlarged lymphatic glands. The tongue was in a mild condition of chronic superficial glossitis. Five days later a radium tube containing 82 mgr. of radium was inserted into the lip from the end of the growth, the inside of the lip and gum being protected by a thin lead plate 2 mm. thick, fixed in position by attachment to the teeth. The radium tube was left in for 24 hours. Marked inflammatory reaction followed, and a typical radium necrosis occurred on the lower lip; all the hair on the upper lip fell out. Nothing further was done until October, when it was found that almost the whole of the growth had disappeared, leaving, however, a hard ulcer on the inner aspect of the lip towards the left side, and some induration around it. The ulcer was about ½ in. in diameter and very superficial. On this day a tube containing 82 mgr. of radium was again inserted into this part and left in for 18 hours. Inflammatory reaction was again marked, and a superficial ulcer appeared on the outer side of the upper lip. This took about a fortnight to heal, and at the end of that time the ulcer on the inside of the lip had disappeared. The condition showed still a little hardening towards the left side and a certain amount of scarring of the whole lip, but there was no ulceration, and the movements of the lip seemed very little impaired. Microscopical examination: Squamous-celled carcinoma.

(2) A man, æt. 35, who had first noticed that his throat was sore and that he had a swelling in the neck in January, 1913. In June, 1913, he attended a hospital, where a piece of growth was removed from the back of the tongue for examination. In the same month he was an in-patient at another hospital, where the growth was considered to be malignant and inoperable. He was admitted under Mr. Kellock's care in July, 1913, with a growth about the size of a walnut towards the left side of the back of the tongue, deeply ulcerated on the surface with hard edges. The mass was in contact with the soft palate and appeared to infiltrate the glosso-epiglottic fold on the left side. The movements of the tongue were impaired, and there was a good deal of difficulty in swallowing. The cervical lymphatic glands on the left side were markedly enlarged, they were very hard and only slightly movable; one enlarged gland could be felt on the right side of the neck opposite the angle of the lower jaw. A week later, under an anæsthetic, 82 mgr. of radium were inserted into the base of the growth and left for 15 hours. After a few days inflammatory reaction followed, the soft palate and base of tongue being covered with a yellowish membrane. After a week a marked diminution in the size of the growth was noticed, and this continued until it had practically disappeared in 14 days, and at the same time the glands in the neck became markedly smaller and more movable. The patient himself was quite sure that the circumference of the neck became much less. The reaction in the mouth had disappeared in 21 days. At the end of September the patient was readmitted; there was then practically no sign of the growth in the tongue, but the cervical glands were still considerably enlarged. These were removed by operation, the whole of the chain on the left side and one gland on the right side being excised. The wounds healed by first intention, and the patient was discharged. When shown there was nothing to be seen or felt of the growth on the tongue, and the neck on the left side felt clear; there was, however, a little hardness about the scar on the right side of the neck.

(3) A woman, æt. 50. The patient stated that she had had a thin yellow discharge from the right ear for two years, but had had no pain until August of the present year, when a tumour began to grow at the meatus; then the discharge became less, but was stained with blood. She had only been deaf since the appearance of the growth. For about a fortnight before admission to the hospital she had noticed that the right side of the face was weak. On admission a hard growth, about the size of a filbert, was found to be growing from the margin of the meatus of the right ear, involving the pinna and the skin in front of the ear. The surface was slightly ulcerated, and there was a foul-smelling discharge. There was no marked enlargement of the cervical lymphatic glands. The facial nerve on the right side was completely paralysed. Three tubes of radium, containing altogether 144 mgr., were inserted into the growth, and left in for 24 hours. The inflammatory reaction was not very marked. About a month later she was readmitted, and it was then found that most of the mass of growth had disappeared, and in its place a small slough was visible at the upper part of the meatus, surrounded by an ulcerated surface from which there was a slight discharge. Radium was again inserted in two tubes containing altogether 104 mgr. for 24 hours. Inflammatory reaction was absent up to the time of her leaving the hospital, and she had not been seen since. Microscopical examination: Squamous-celled carcinoma.

(4) A man, aged 55, had been in the habit of smoking a clay pipe. About a year ago he first noticed that he had a sore on the lower lip, but did not consult a doctor about it until November this year. On admission to hospital there was a typical malignant ulcer of the lower lip, situated a little towards the right side. The ulcer measured 1⅛ in. in length by ⅝ in. in breadth, the edges were very hard and there was slight discharge from the surface; the surrounding parts were not much affected but were covered with a thick brown crust. No enlargement of lymphatic glands was observed. Under local anæsthesia, a tube containing 82 mgr. of radium was inserted into the lip under the growth, the upper lip being protected by a thin sheet of lead. The tube was left in position for 21 hours. Inflammatory reaction followed almost immediately. The condition 15 days after insertion of the radium showed that the greater part of the growth had disappeared, the lips still showed signs of this inflammatory reaction, being swollen and slightly ulcerated, so that there was little difference to be observed between the original situation of the growth and the rest of the lip. On the inside of the lip there was a marked condition of radium necrosis, the surface being covered by the usual yellowish membrane.

Dr. F. S. **Palmer** showed a case of congenital heart disease and hemiplegia. The patient, a woman, æt. 22, had always been blue as long as she could remember, and suffered from shortness of breath on the least exertion, but she went to school in the usual way, and no special care seemed to have been taken of her as regards the heart trouble. She had had scarlatina at the age of six and attacks of acute rheumatism at 17 and again at 19 years of age. In March 1912, she had an attack of hemiplegia of sudden onset on the left side, involving the facial muscles. She was aphasic for a fortnight and then recovered her speech. Before the hemiplegia she was left-handed, but she now used both hands equally well. After her admission to the hospital she had such alarming syncopal attacks and cardiac dyspnœa that it was necessary to keep her in the recumbent position for nearly two months. Under treatment she had steadily improved in health, but she still walked with a slight limp, and there was some weakness of grasp in the left side. The points of interest in the case at present appeared to be as follows:—(1) The degree of cyanosis, probably from birth, with remarkable clubbing of the fingers and toes and polycythæmia. (2) The cardiac impulse could be felt best during active respiration about the sixth intercostal space in the anterior axillary line. Percussion and skiagrams showed no enlargement of the heart to the right, but the organ was generally increased in size and apparently lay with its long axis on the diaphragm. A loud, harsh murmur could be heard with its maximum intensity at about the junction of the third left costal cartilage with the sternum, and occupied the whole period between the first and second sounds, ending sharply with the latter. The murmur was well heard over the sternum in that position, but it was not audible over the whole of the cardiac area, nor was it conducted up into the back. Nothing could be heard at the back, and there was no evidence of any pulmonary complication. The absence of any other physical signs in the heart and large thoracic arteries pointed to some kind of congenital malformation with possibly superadded rheumatic endocarditis, or endo-pericarditis, as an explanation of the apparent hypertrophy of the left ventricle. (3) The hemiplegic symptoms had to a great extent disappeared. She used her left hand, and wrote unusually well with it. Her deep reflexes were equal but slightly increased, and the plantar response was flexor on both sides.

Mr. W. G. Spencer showed a case of latent fracture of the patella. The patient, a man, æt. 45 was exhibited six months after the union by wire of a transverse fracture of the left patella, along with photographs taken after the fracture, and after the union. He sustained a sub-aponeurotic fracture from slight violence, after which he was able to walk 9 miles and again 15 miles, also to go up and down stairs frequently until a week after the fracture, when, in stepping down one step, the aponeurosis tore widely, with separation of the fragments.

Dr. F. J. Poynton showed a case of cleido-craniodysostosis, with signs pointing to pressure on the brachial plexus by the rudimentary clavicles. It was that of a girl, æt. 19. Both clavicles had never been properly formed. The fontanelles were very late in closing (about the age of 17). There was no family history of importance, except that the mother had myxœdema about the time the girl was born. For the last five weeks the patient had had shooting pain in the inner side of the arm and the front of the chest and the right side; these had been getting worse. The teeth of the upper jaw were very irregular and ill-formed. Both clavicles were imperfectly ossified, each being in two pieces. The right arm showed a diminution in pulse when the shoulder was depressed, and there were areas of hyperæsthesia on the inner side of the arm and the front of the chest. The main point was the question of the pain and the appropriate treatment.

Mr. T. B. Layton showed a case of swelling of the upper jaw. The boy, æt. 18, had noticed the swelling on his face for two months. The teeth were all present with the exception of the third molars, and as none of these were milk teeth no unerupted teeth were likely to be present in the front of the jaw. Mr. J. S. Cocks had examined them with the hot and cold tests and found them to be alive, nor could he find any evidence of caries, but reported that there was an acute inflammation of the pulp of the left lateral incisor. On transillumination the right side was opaque, the left side was markedly translucent. On the left side there was a swelling of the maxilla, which bulged on to the face, the anterior two-thirds of the palate, and the inferior meatus of the nose. Externally it was oval and passed up to the lower mesial quadrant of the orbital margin, but above this the nasal process was felt to be of its normal shape. In the mouth the swelling did not cross the mid-line; the alveolar margin was expanded and not thickened; at the reflection of the mucous membrane from gum to cheek, in the space between the second premolar and first molar, was a circular area of ¼ in. diameter where there was no osseous tissue in the wall of the lump. Above and behind this the zygomatic process of the maxilla could be felt. The crowns of the lateral incisor, the canine and both premolars were rotated inwards.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

MEETING HELD DECEMBER 4TH, 1913.

The President, Dr. W. S. A. Griffith, in the Chair.

The following specimens were shown:—Mr. Alban Doran: An Occluded Vagina after Total Hysterectomy. Mr. J. D. Malcolm: Sloughing Fibroid with Complete Inversion of the Uterus. Dr. G. G. Alderson: Chrobak's Instrument for Embryotomy. Dr. Wilberforce Smith: Epidiascope Demonstration of Altmann's Granules in Tissues at point of Invasion by Squamous Carcimona of the Uterus. Mr. Gordon Luker: Hydatidiform Mole and Normal Ovum in Twin Pregnancy.

A Case of Primary Causes of Bartholin's Gland.—Dr. Herbert Spencer read notes of a case of primary carcimona of Bartholin's gland which he had removed, with the superficial inguinal (carcinomatous) glands, on March 3rd, 1912, the patient being well and free from recurrence on October 21st, 1913. A section through the growth and duct (which was unaffected) showed it to be an adeno-carcinoma with degeneration of the cells, causing it to resemble squamous carcinoma. Of the fourteen cases of which an abstract was given, only one other had remained free from recurrence. The disease was very rare, occurred at ages between 28 and 91, half the cases being over 50. The two sides were affected with equal frequency. The relation of the disease to gonorrhœa and inflammation was discussed and a short clinical history of the disease was given.

It appeared first as a small, hard, tender lump, accompanied by pain of a severe, lancinating character, sometimes passing to the coccyx and groin, and greatly increased by walking, menstruation, and coitus. The skin over it might be bluish and the remains of the hymen œdematous. The lump was much harder than an inflamed gland, and its surface was sightly nodular After a time the growth became apparent to the sight and burst through the skin at one or more orifices. The tumour might then become papillary or irregular or ulcerated on the surface and might be fixed to the pubic bone. The inguinal glands were early affected.

Remarks were made on the above by Dr. Eden, Dr. Russell Andrews. Specimen referred to the Pathology Committee of the Section.

Dr. Victor Bonney read two short communications:

(*a*) *Case of Pre-Eclampsia at the 24th week treated by Cæsarean Section.*

(*b*) *Case of Cæsarean Myomectomy with remarks on the operation.*

(*a*) The first concerned a case in which a primigravida, 24 weeks pregnant, was suddenly seized with symptoms of acute pregnancy toxæmia. The urine was much diminished in amount and contained a quantity of albumen and blood. Marked jaundice developed and rapid loss of sight occurred. Immediate evacuation of the uterus being indicated, this was effected by performing abdominal Cæsarean section. The toxæmic symptoms disappeared within two days and the patient made a rapid recovery.

(*b*) The second case was that of a primigravida whose uterus was the seat of six large fibroids in addition to the pregnancy. Cæsarean section was performed at term and after the child had been delivered the tumours were enucleated. The largest of them was the size of a melon, and was submucous in position.

The speaker submitted that this operation, which he termed Cæsarean myomectomy, should be the operation of choice in all cases of pregnancy, complicated by fibroids in which the uterus was uninfected. When pregnancy occurred in a fibroid uterus the functional value of the organ was proved, and it was worth conserving. Moreover the retractile state of the musculature was peculiarly favourable for enucleation.

Remarks on the foregoing were made by Dr. Williamson, Dr. Routh, Dr. Blacker, the President, Dr. Maxwell, and Dr. Eden.

Mr. Beckwith Whitehouse (Birmingham) read a paper on

"THE RELATION OF SYPHILIS TO THE UTERUS."

The author pointed out that the occurrence in the uterus of lesions, the result of syphilitic infection had long been regarded as extremely rare. Apart from the occasional record of a primary chancre upon the portio vaginalis of the cervix uteri, or the suggestion that some ulcerations in this area might be of syphilitic origin, very little had been written upon the subject. If it was true that the corpus uteri possessed a definite immunity to the ravages of the spirochæta pallida it was a matter of considerable interest, especially as the relationship was so intimate in connection with placental and fœtal syphilis. He did not think that this was the case, but considered rather that syphilitic lesions of the uterus had been overlooked in the past. In 1912 he had suggested that the underlying pathological factor in some cases of chronic metritis and fibrosis uteri might be syphilis. He had since had an opportunity of investigating by means of the Wassermann reaction, sixteen patients with a clinical diagnosis of this nature. Seven of these cases showed a well marked positive reaction, although only one gave a history or presented other evidence of direct syphilitic infection. In three patients it was necessary to remove the uterus on account of severe hæmorrhage unrelieved by repeated curetting and various intra-uterine applications. The uteri obtained from these cases all showed well-marked fibrosis and peri- or endarteritis of the vessels. The pathological picture coincided with the appearances seen in interstitial myocarditis, orchitis, hepatic cirrhosis and other indurative conditions which were generally accepted as being due to syphilis. The author asked, therefore, why, in the case of the uterus, was it necessary to call for other factors such as inflammation due to septic causes, repeated pregnancy, etc., to account for an exactly similar lesion, especially when the Wassermann test showed that a certain proportion of such patients were undoubtedly infected. The exact proportion that syphilitic fibrosis of the uterus bears to fibrosis due to other causes must, however, remain undetermined until a longer series of cases could be brought forward. It is possible that errors may arise even in a long series owing to the phenomena associated with "Latent Syphilis." Knöpelmacher and Lehndorff have shown that 50 per cent. of the mothers of syphilitic children give a positive reaction some years after the birth of the last child, although a few months after parturition 90 per cent. of such women react positively. The author was of opinion that it was largely from this class that the ranks of the chronic metritis patients are filled.

He then drew attention to the fact that some cases of pyometra unassociated with malignant disease appeared to bear a distinct relation to syphilis. He had seen two well-marked examples in patients who exhibited indubitable evidence of syphilitic infection, and he had received records of two others.

In conclusion he referred briefly to observations recently made upon the menstrual blood collected through an intra-uterine catheter during the secondary stage of syphilis. Specimens from five cases had been investigated, and in two the intra-cellular bodies described by McDonagh and Ross had been found. The presence of such bodies in the menstrual discharge is important as proving a possible source of infection to the uterine tissues through which they pass. At present the spirochæta pallida has not been demonstrated in the menstrual blood.

Remarks were made by the President, Dr. Amand Routh and Dr. Blacker.

Mr. M. J. Stewart (Leeds) introduced a case of

"FŒTUS ACARDIACUS AMORPHUS."

He gave an account of a typical example of the fœtus acardiacus amorphus (with drawings and radiographs) the specimen of which was shown, together with radiographs and microscopic preparations of the viscera. The monster occurred as the twin of a healthy male child, and was born half an hour before it. The parents were healthy, and the pregnancy had run a normal course.

The specimen shown consisted of a trunk-like mass without head or limbs, to the flattened ventral aspect of which the umbilical cord was attached. There were nates at the posterior extremity, with an anus-like dimple between, and ventral to the latter, two other mesial dimples, possibly corresponding to genital and urinary apertures respectively. Two small thumb-like projections were present in the position of the lower limbs. At the anterior extremity there was a mesial, ventrally placed vesicle filled with fluid, and laterally, two small dimples in the position of the upper limbs. Radiographic examination showed the presence of a vertebral column of eighteen segments, to the upper seven of which ribs were attached. Posteriorly the pelvis was represented by two bones on each side, but of limb bones there was otherwise not the slightest trace.

Dissection of the monster with subsequent microscopic examination showed the presence of liver and bowel, kidneys, ureters and testes, but heart, lungs, spleen and adrenals were all absent.

The paper was discussed by the President (Dr. Griffith) and Dr. Blacker.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, November 7th, 1913.

The President, M. J. Gibson, M.D., in the Chair.

FIBROID UTERUS REMOVED AFTER CÆSAREAN SECTION FOR OBSTRUCTED LABOUR AND PLACENTA PRÆVIA.

The President exhibited this specimen, and said that the patient, whose age was 36, was unmarried, and had had a child six years previously. She had been admitted to hospital, having had hæmorrhage for several hours previously. She also had some weak labour pains, which succeeded the onset of the hæmorrhage, and had been examined at least three times by a "handy woman," then by two students, and afterwards by the clinical clerk. She had then lost a large amount of blood, and the clinical clerk packed her vagina with iodoform gauze before moving her into hospital. When this was completed she refused to go to hospital, but when the hæmorrhage began to appear through the plug some hours later she consented. When she was admitted she was bleeding steadily, though not profusely, and was collapsed. Examination showed that the pelvis was obstructed to a very large extent by the fibroid, which could not be pushed out of it, and protruding through the cervix the edge of the placenta could be felt. During the examination a considerable quantity of blood escaped from above the tumour. The fœtal heart could not be heard. He decided to remove her uterus immediately after the Cæsarean section, because she was probably septic. She was kept alive during and immediately after the operation with much difficulty, and finally made a good recovery. The specimen raised important questions. Firstly, the value of Cæsarean section for the immediate control of hæmorrhage in placenta prævia; secondly, the treatment of a single large interstitial myoma after Cæsarean section; and, thirdly, the value of hysterectomy in cases which are probably septic.

CANCER OF THE OVARY.

Tho President, in exhibiting this specimen, said it had been removed from a patient, æt. 63, who had never borne a child. She stated that she had noticed the increasing enlargement of the abdomen, but that she had suffered very little pain. A large tumour could be felt, partly cystic and partly solid. When the abdomen was opened the diagnosis of malignant degeneration of an ovarian cyst was made, and the tumour was removed entire, together with the uterus and the other ovary *en masse*. The patient made a good recovery.

The **President** also showed sections from another case in which the ovaries and uterus had become cancerous in a patient whose breast had previously been removed for cancer. The points raised by the first specimen were the necessity for removing all the cysts of the ovary entire and the need for removal of the other ovary and uterus in cases of cancer.

Dr. **Gibbon FitzGibbon**, referring to the second exhibit, considered it of interest to hear of involvement of the uterus from an ovarian tumour. He inquired if the malignancy in the uterus was of the same character as that of the ovary, and if there was any evidence of metastasis in other parts of the body. He did not think a cyst should be tapped where it could be got out whole, an incision of two or three inches additional length was to be preferred to running the risk of fluid getting into the abdominal cavity.

Dr. **Jellett** said that if the child was dead at the time of the operation he would have preferred to have left it in the uterus, and not to have done a Cæsarean section, as this lessened the risk of spreading any infection that might have been in the uterine cavity. In cancer of the ovary he agreed with the view taken by Dr. FitzGibbon, that the second ovary should always be removed, but did not know whether it was necessary to remove the uterus also, as metastases from the ovary to the uterus were unlikely. On the other hand, removal of the uterus permitted a better clearance to be made of the broad ligaments, and so might be wise.

Dr. **Gibson**, in replying, said that in the case of fibroid uterus he performed a supra-vaginal hysterectomy and drained the abdomen through the open cervix, having stitched the peritoneum anteriorly and posteriorly to its edges. The only reason that the child was removed during the operation was that the pregnant uterus and tumour made a very large mass, and he considered that the operation could be completed more rapidly if the uterus were empty. He consequently made the transverse fundal incision and dropped the uterine contents out of the uterus by anteflexing it over the pubis. He did not touch the cavity of the uterus. The placental site continued to bleed, and having packed the cavity with a large strip of iodoform gauze, he proceeded to do the hysterectomy as rapidly as possible. The patient at this time was very collapsed. In the case of cancer of the uterus and ovaries following removal of the breast, the cancer in uterus and ovaries was of the same nature. He considered that the uterus and other ovary should be removed in all cases of cancer of the ovary.

SUBMUCOUS MYOMA REMOVED BY MYOMECTOMY.

Dr. **Jellett** said the patient E. M., æt. 30, was admitted on October 18th, 1913. She had been married three months, and had not been pregnant. She complained of a tumour, which she first noticed a year and a half previously. It was then about the size of an orange, and had been growing steadily ever since. She also complained of menorrhagia, some dysmenorrhœa, leucorrhœa, and frequency of micturition. The urine was normal, bowels regular, and heart and chest normal. When examined, the abdomen was found to be occupied by a tumour reaching up to the umbilicus, hard, and incorporated with the uterus. A submucous myoma, the size of a large orange, was found projecting from the cervix, and probably continuous in the tumour above. Around this the cervix could be felt very much thinned out and dilated.

FULL-TIME EXTRA-UTERINE PREGNANCY WITH UTERUS.

Dr. **Jellett** said the patient K. W. was admitted on June 12th, 1913, æt. 38, married fifteen years. She had had four children at term, four abortions, and was pregnant at term when admitted. Her history was one of amenorrhœa since September, 1912. On the 29th of the following April the patient had what she regarded as labour pains, accompanied with vomiting. She stayed in bed for a week; the pains ceased, and since then she had "felt no life." She stated that she noticed her stomach getting smaller since then, and complained of some discharge and a bad taste in her mouth. The urine was almost normal, containing only a slight trace of albumin. On admission, the top of the fundus was just above the umbilicus. No fœtal heart heard. Two days later—that is, June 14th—an attempt was made to induce labour by Krause's method. The cervix seemed somewhat hard and small for a pregnant cervix, but nothing else abnormal. Bimanual examination made, but no information got, mainly because patient straining hard under anæsthetic. Two bougies were inserted gently through external os, and allowed to take their own direction in usual way. There was no resistance to their passage. Tents were also inserted, and the vagina packed with iodoform gauze in sterile glycerine. On the following morning labour had not come on, the tents and bougies were removed, more tents inserted, and the vagina packed as before. Next morning, June 16th, still no labour pains, so the tents were removed. Fœtal head felt low in posterior fornix. A foot was brought down, the head pushed up, and the child extracted, during which the cervix seemed to tear behind. Fœtus was macerated. On attempting to remove the placenta manually, the hand entered a cavity, and a much larger cavity was felt on right, extending up towards the liver. No placenta could be felt, but a piece of omentum came down and the intestines could be felt. Laparotomy was immediately performed, and the following was found:—Free blood, but not much. The placenta was free, and was removed first. What was evidently an abdominal pregnancy was then discovered, the sac apparently originating in right broad ligament, extending out towards the left, and up on right towards the liver. The posterior lip of the cervix was torn, the tear extending downwards across posterior fornix. The lower part of the uterus seemed very friable. Supra-vaginal hysterectomy was done, and the sac packed with gauze, the end being pushed out through the tear in the posterior fornix, and the cavity stitched together over the gauze. Two bimanual examinations failed to reveal the presence of a small uterus, this condition being only discovered on laparotomy.

Dr. **Tweedy**, referring to the myomectomy that had been performed previously by him on this patient, asked for fuller details as to the operation.

Dr. **Rowlette** said that an examination of the uterus from the pathological point of view gave no assistance. He suggested that, having regard to the fact that six weeks previously the patient, who lived in the country, had labour pains, the uterus at the time ruptured, and allowed the greater part of the ovum to pass into the abdominal cavity, and that the uterus then involuted.

Sir **William Smyly** said that the difficulty in his mind was, where did the pregnancy originate? The ease with which the uterus ruptured with quite extraordinary.

Dr. **Neill** recalled a case very much like this that had been treated in the Coombe Hospital. The foot of the fœtus was brought down and allowed to remain so for several hours, and then extracted. It was smaller than that shown in the present exhibit. After getting the fœtus, an effort was made, without effect, to get the placenta. There appeared to be an edge to be felt, but he did not attempt to remove it, as the patient was in a very bad condition, and died the following morning. There was a history of bleeding in previous pregnancy. Partial *post-mortem* examination showed the uterus to be as large as the fœtal head, and there was an old tear. A ragged placenta was discovered attached to the sigmoid flexure. The theory in this case was that the uterus ruptured and the fœtus slipped out.

Dr. **M'Allister** asked if the placenta was frequently found separated in such a case. He suggested that at the time that the patient had the pains rupture might have occurred by the placenta having eaten its way through the uterus, and in this way the fœtus might have escaped.

The President asked what was found when the abdomen was opened. He recalled a case of extra-uterine pregnancy at full term. In this, when the abdomen was opened, the child was removed alive from the bag of membranes. There was severe hæmorrhage from the placental site, which was immediately controlled by compression of the aorta, and afterwards by a firm pack of gauze. The placenta was attached to the ruptured left tube, the posterior layer of the broad ligament, and to the lower bowel and the tissues about it. The gauze was removed gradually, the last piece on the twelfth day. The patient made a good recovery and the child survived. He had never seen a case of ruptured uterus in which the uterine contents had escaped unruptured into the peritoneal sac. The child in every case lay free among the intestines. The fact that the child in this case had lain in its membranes outside the uterus was in favour of the case being one of extra-uterine pregnancy.

Dr. Jellett, in replying, said that the cervix was dilated in two ways—(1) by the two sets of the sea-tangle tents, and (2) by the tearing of the posterior lip during the delivery of the fœtus. The sac of the ovum was adherent to the intestine and omentum—a fact which disproved Dr. Rowlette's suggestion of the extrusion of the ovum through a rupture of the uterus six weeks before the patient came to hospital. It was found impossible to remove the sac at the operation, and it was left, being plugged as tightly as possible with iodoform gauze, but the membranes gave no subsequent trouble. He considered that if one knew the state of the left tube the nature of the case would be clear, but, unfortunately, this tube was not in a recognisable condition at the time of the operation, owing to the effect of the extravasated blood on the peritoneum. Dr. Tweedy's previous myomectomy was done on the anterior wall of the uterus, and he, Dr. Jellett, did not consider that it had any effect in producing the condition met with. He would like to emphasise the fact that neither Dr. Madill nor he himself had the least idea that they were not dealing with an intrauterine pregnancy until the abdomen was opened after the rupture of the gestation sac.

Referring to the second case of myomectomy, his reasons for operating through the vagina were—(1) that he wished to save the uterus, and (2) that he was afraid of doing an abdominal myomectomy on account of the risk of infection owing to the manner in which a large part of the tumour protruded through the cervix into the vagina.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

Meeting held November 28th, 1913.

The President, Mr. A. Ernest Maylard, in the Chair

Mr. Henry Rutherfurd showed (1) a case of plexiform neuro-fibroma in a girl æt. 8 years, with hypertrophic and pigmentary changes in the skin and some angeiomatous patches, atrophy of muscles, and atrophy or rarefication of bone as indicated by repeated fractures and verified by skiagraphs.

(2) A case of cystic disease of bone (upper end of humerus) in boy æt. 14 years, treated by free opening up and implantation of bone. The patient was shown with skiagraphs before and after operation.

(3) Gall-bladders removed in conditions of cholelithiasis (four recent cases), with microscopic preparations.

(4) (With Professor J. H. Teacher) the spinal column of a boy æt. 6 years, the seat of multiple tuberculous foci (upper cervical, dorsal, and lumbosacral).

Dr. A. Louis McIlroy made a short communication on a

CASE OF CHORION-EPITHELIOMA

and one of

MYOMATA COMPLICATED WITH PREGNANCY

and showed coloured photographs. In the first case, that of a patient aged 30, a diagnosis of incomplete abortion was made, and on microscopic examination of the curettings, Dr. Teacher found chorion-epitheliomatous tissue. Panhysterectomy was performed with complete recovery. In the second case the patient, æt. 30, had been married six years and was sterile. Dysmenorrhœa and menorrhagia had been present. On examination a diagnosis of pregnancy with ovarian cyst was made. On the onset of uterine hæmorrhage the patient was examined under an anæsthetic and myomata with pregnancy diagnosed. Supravaginal hysterectomy was performed, and on section of the specimen a $4\frac{1}{2}$-months fœtus was seen. In the wall of the uterus were several myomata, one of which showed marked degenerative changes. The patient's health was markedly improved after operation.

Dr. J. W. McNee read a paper on

RECENT WORK ON THE ÆTIOLOGY OF GALL-STONES,

which will be found under the heading of "Original Papers," page 670.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 13th, 1913.

Typhoid Fever in Children.

The clinical characters of typhoid fever in children differ somewhat from those observed in adults. The *début* is frequently brusque, without prodroma, while two symptoms, says Dr. Pater, almost special to children are frequent, vomiting and abdominal pain.

The vomiting is alimentary at first, becomes rapidly watery and even bilious. The abdominal pain can be moderate, diffused or sharp and localised in the right iliac region leading one to think of appendicitis. In about half of the cases of typhoid fever in children this abdominal pain is felt. At the end of the first week of the disease it generally disappears or it may persist with diarrhœa.

The rose-coloured spots or petechiæ are present as in the adult; tumefaction of the spleen is also observed in the majority of cases. The temperature varies more in the child than in the adult; ascension is more rapid and defervescence more prolonged.

As to complications, the gravest concern the heart, the brain and the intestine. That of the heart is characterised by tachycardia, pallor of the face, cold extremities, cardiac depression terminating frequently in collapse and death.

Subacute meningitis is, naturally, of extreme gravity; the same may be said of intestinal hæmorrhage where perforation is to be feared. There is one secondary symptom syndroma sometimes observed and generally mortal, green diarrhœa accompanied with vomiting and a sudden fall in the temperature.

Relapse in typhoid fever of children is frequent, consequently the period of convalescence should not be neglected, no change in the *régime* followed during the course of the malady should be allowed, nor should the patient leave his bed until 15 days have elapsed since the definite fall in the temperature.

Rheumatism.

Salicylic acid, 1 dr.
Antipyrine, 1 dr.
Bromide of potassium, 1 dr.
Ext. of belladonna, 6 grs.
Ext. of opium, 5 grs.
Essence of turpentine, 1 dr.
Vasoline, 1 oz.
Lanoline, 1 oz.

Rub into the inflamed joint, apply a layer of cotton wool and cover with oil silk.

Tuberculous Ulcerations.

Every five days canterise the surface with

Nitrate of silver, 15 grs.
Distilled water, 1 dr.

Touch the parts once a day with
Lactic acid, 1 oz.
Water, 2 oz.

Dress with iodoform and destroy when necessary the peripheric nodulæ with the thermocautery.

ALCHOLISM IN FRANCE.

Alcoholism, tuberculosis and syphilis are ravaging France, and participate in a large measure in its decreasing population.

An engineer of no small merit, M. Jaquet, has just published a book on alcoholism, sounding a note of warning on the havoc it is causing among the working classes.

The working classes, says the author, consume four-fifths of the alcohol manufactured in France. This "national peril" has become an important factor in the development of tuberculosis, criminality and lunacy.

M. Jaquet proposes three methods for dealing with the subject: Educating the masses by means of the public schools, conferences given by doctors, sociologists, officers in the barracks, etc. Legislation—prohibition of absinthe, limitation in the number of drinking shops, rigorous application of the laws on drunkenness, increasing the duties on alcohol, social measures which by improving the material condition of the working classes will raise their moral level.

The cultivation of the vine in France covers 1,760,000 hectares (2½ acres). The produce insures to the proprietors an annual revenue of 1,100 millions of francs. The manufacture of alcohol attains annually 2,500,000 hectolitres (22 gallons) of the value of 125 million francs. Five million persons are more or less employed in the alcohol traffic. The State duties represent 12 per cent. of the total revenue.

GERMANY.

Berlin, Dec. 13th, 1913.

AT the Urological Society, Herren Roth and Meyer read a paper on

URETHROSCOPY OF THE POSTERIOR PART OF THE URETHRA.

The investigations were carried out by the instruments of Goldschmidt and Wossidlo. The material on which the results were founded was very large. The most frequent cause of morbid changes in the posterior urethra was gonorrhœa of the chronic form. In 20 per cent. of the cases examined, polypi were met with, granulations, etc. In a great number of these cases there were no subjective symptoms. A similar condition of the mucous membranes was present in cases of sexual neurasthenia. These were not, however, the cause, but the result of the nervous condition. The frequent result in general treatment of these cases was in favour of this assumption, and was in contrast to that of Ollawski. In most cases of sexual neurasthenia the affection might be caused by abstinence, morbid sexual perversions, venous engorgement, the engorgement leading to the mucous changes mentioned. A similar condition was met with in impotence. Treatment was limited to caustics and the cautery. Through the treatment a serous saturation was brought about that led to a state of irritation in which the centre for erection was implicated. Upon the whole, however, the treament was mainly general. In about 80 per cent. of the cases relief was obtained by these means alone. The effects of caustics and cautery were not always lasting. The speakers thought too much had been made of the local changes, and this exaggerated belief in their importance had led to meddlesome treatment that was not necessary or advisable.

At the Verein für Innere Medizin, Hr. Guggenheimer contributed a note on

AUXAUTOLYTIC MATERIAL IN PATHOLOGICAL SERUM.

He said there were substances in blood serum that advanced autolysis of certain organs. He had, therefore, named them auxautolytic substances; he considered it probable that they were of the nature of ferments. He first attempted to influence autolysis of the human brain by human serum, led thereto by the peculiar behaviour of the albuminous fractions in syphilitic serum. The effects were negative, however; he could not effect any noticeable influence. On the other hand, serums from three cases of croupous pneumonia and serum from a case of uræmia did influence autolysis of the brain. The strengthening of function was considerable. Autolysis of the rabbit's liver also was frequently influenced by serum of croupous pneumonia and chronic nephritis; a similar effect was produced by the blood serum from a case of diabetic coma and also from one of commencing delirium. This auxautolytic serum was not derived through any changed reaction of the blood, nor through pharmacological agents, nor from a diminution of the quantity of complement. The appearance of these auxautolytic substances pointed to the existence of intravital autolytic processes. In discussing how far there was any relation between Abderhalden's protective ferment and the serum material described, he said there was a possibility that there was a specific autolytic organ-enzyme that passed into the blood. With this opened a prospect of demonstrating clinically some elective auxautolytic action.

Hr. Pincus had found that pneumonic serum disintegrated fibrin in the crises. That the protective ferments did not come from the leucocytes was shown by the fact that they were present in undiminished numbers in animals that had been rendered free of leucocytes by the action of thorium X. He also held it to be probable that the protective ferments in the blood were escaped organ-ferments, heterolysines in Jacoby's sense.

Hr. Jacoby also held Abderhalden's protective ferments to be an outflow of organ-ferments into the blood. It had to be assumed that there were serum substances in the blood that increased the action of ferments.

AUSTRIA.

Vienna, Dec. 13th, 1913.

WHOOPING COUGH.

AT the recent meeting of the K.k. Gesellschaft in Vienna, a girl, æt. 3½, was exhibited by Dr. F. Hamburger, who had been cured of whooping-cough of five weeks' standing by two days' treatment with faradisation. This case, accordingly, furnished a typical illustration of the fact that whooping-cough, when it has lasted for five or six weeks, comes in many cases to be modified, clinically and pathologically, so far as to be correctly regarded as a neurosis; inasmuch as the affected children, long after the true disease has actually quite disappeared, continue to display the regular recurrence of the paroxysms of coughing with all their specific characteristics. Dr. Hamburger distinguishes, in the course of a case of whooping-cough, a stadium organicum and a stadium neuroticum; that is to say, a stage in which the paroxysms must take place, as the necessary consequence of the specific alterations of tissue, and a stage in which, notwithstanding the complete resolution of the organic changes, the paroxysms continue to be repeated in way of semi-voluntary reflexes. In the great majority of cases the organic stage does not last more than five or six weeks, and it is accordingly desirable, at the close of this period, to commence a course of energetic treatment by suggestion, for which purpose the employment of the faradic current is specially suitable. By its judicious application, the intensity and frequency of the paroxysmal attacks of coughing can often be diminished to a conspicuous degree in a very short time; and those of the whooping-cough proper be made to disappear completely. To the query of Dr. S. Federn whether cases of whooping-cough continue to be infective during the neurotic stage, Dr. Hamburger replied that it was then to be regarded as such in those cases only in which the patients happened to be carriers of bacilli.

RECTAL CARCINOMA: RADIUM TREATMENT OF SAME.

Dr. O. v. Frisch exhibited a recent specimen of rectal carcinoma which had been treated for many months with radium radiations, and had been subsequently extirpated by him. The carcinomatous tumour had conspicuously diminished in size during the radium treatment, but a firm rind was formed in which the whole pararectal tissue was embedded. This callous thickening of the pararectal connective tissue is an unusual condition, and is possibly analogous to the changes which have been observed after radiation treatment of struma. This fact suggests that it may be attributed to the radium.

Dr. O. Schindler then described the radium treatment of the rectal carcinoma of which the specimen had been exhibited by Dr. Frisch. The radiation agent that he had employed was a Dominici tube, which contained 28 milligrammes of radium bromide. The primary rays were filtered through a sheet of platinum of 0.8 mm. in thickness, and the feeble secondary rays were intercepted by thickly-gummed glove fingers. The total result was the application of about 6,000 mg. radium bromide within a month, and so arranged that about 2,000 mg. radiations had been applied *in continuo*. A pause was then made. Such pauses proved to be necessary in the treatment of rectal carcinoma—on the one hand to give time to the organism for transforming the products of cell destruction into innocuous materials; and, on the other hand, in order to keep within bounds the symptoms of local irritation (tenesmus and strangury), which were specially likely to occur during the radiation treatment of rectal carcinoma, more especially the strangury in cases in which the growth had infiltrated the wall of the bladder. A higher dosage appears to him to be inadvisable; inasmuch as a constant regard must be had to the danger of perforation of the bladder on account of the infiltrating adhesion of the neoplasm to the wall of that viscus.

Theory and Treatment of Diabetes.

The discussion of Dr. W. Falta's communication on "The Theory and Treatment of Diabetes" was again resumed, and concluded. Dr. O. Pick discussed the ætiology of diabetes mellitus, which must, he believes, be sought for in some instances in neural sources; the primordial germ having been stimulated to unhealthy activity by respectively psychic agencies.

Dr. Reach emphasised the view that in the so-called carbohydrate cure the carbohydrate itself may not be the effective agent; it must, however, express its influence in every form in which it may be used: for example, in that of bread. But we should bear far more constantly in mind than hitherto has been done the fact that in the respective aliments other, and still unknown, compounds are present, which confer upon them their own individual therapeutic value (but which, in the case of bread, are transmuted or destroyed in the process of baking).

Dr. W. Falta, in the course of his concluding reply, dealt with the various objections and arguments of the speakers. With regard to the importance of fats for realisation of the value of carbohydrates in the carbohydrate cure, the results of experiment had shown that, with regard to this realisation, the result was apparently the same whether much or little fatty matter had been added to the soups or other aliments used by the patient. The fact that absorption of carbohydrates is retarded by the presence of fatty matters is unquestionable. But the pleasing illustration furnished by the knowledge that cereals, in the form of soups, are so much better tolerated, even than bread, did not seem to him of any consequence in this connection. In this clinico-chemical analysis he attributes the principal importance to the fact that the cereals, in the baking and cooking, undergo a physical process of unfolding by which their adaptability to the physiological process of absorption is very much altered.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Indian Students and their Grievances.

A meeting of fully 100 Indian students was held in Edinburgh last week to determine the attitude which should be taken up towards the newly appointed sub-committee of the Advisory Council to inquire into the alleged grievances of the students against educational or other bodies. The general tenor of the speeches made at the meeting was that the sub-committee's inquiry ought to be discouraged. To lay grievances before such a body would be to admit the guardianship of the India Office, and to acknowledge and strengthen the position of the local adviser, to whose presence objection was taken. One of the speakers said that they had no educational grievances, and that the creation of a department to bring about better relations between them and a certain section of the students was a sham. One cannot but admit that there is some reason in the position taken up by the students; certainly no offical inquiry can establish harmonious relations where good manners and good taste are wanting. At the same time, ventilation of the question would probably do good, and the refusal of the Indian students to co-operate is obviously determined by dislike of the idea of being in any respect under the authority of the India Office rather than by anything else.

Edinburgh School Children.

The work of the School Board for the year was under review at the Board meeting last week, and in connection therewith a few matters of medical interest were brought up. Free dinners are now supplied to necessitous children, of whom the largest number on the free food roll was 757, during the third week of February. The total number of pupils on the roll was 40,260. This year, 1,011 children received free meals, as against 1,517 last year. The scheme of supplying penny dinners to semi-necessitous children has probably contributed to the marked decrease in the number of applications for free meals. The net cost to the Board of the feeding scheme was £1,861. During the session, 1,940 children were supplied by the police with boots and clothing. An important development during the year has been the provision of medical treatment for needy children. Hitherto, though inspection has been in force for five years, treatment has not been undertaken except in so far that parents have been guided as to which of the voluntary agencies (dispensaries, and so on) they should seek for advice. In many cases notices of this kind to parents were ignored. In 1913 the sum allocated to the Board for medical treatment was £850, and in view of this the Board decided to establish a medical clinic for treatment. This policy was considered the most expedient, as the money was available only in so far as it was actually to be expended during the year; by fully equipping such a clinic from the beginning, any further grants could be devoted to actual treatment. Premises were accordingly leased in Lauriston Place as a medical treatment centre where defective teeth, defective vision, and minor diseases of the ear, nose, and throat can be dealt with. The staff consists of four dentists, one oculist, and two nurses. Since January 16th and up to the end of last session there have been 5,251 attendances by pupils, 993 for visual defects, 1,644 for dentistry, 1,680 for external eye disease, 221 for ear disease, 41 for skin disease, and 672 for the fitting of spectacles.

Presentation to Dr. Melville Dunlop.

On the occasion of his retirement from the staff of the Edinburgh Sick Children's Hospital after 27 years' service, Dr. G. H. Melville Dunlop was entertained to dinner on December 12th by his colleagues on the staff and his old residents, and was presented with a piece of silver plate in token of their affection and esteem, and in commemoration of his long association with the hospital. Mr. H. J. Stiles presided at the dinner, and Dr. J. W. Simpson acted as croupier.

Appointments under the Triple Qualification Scheme.

At a meeting of the Committee of Management of the Triple Qualification of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow, held on Friday last, the following appointments were made:—Mr. D. L. Eadie, 50 George Square, Edinburgh, Inspector and Treasurer; and Mr. Walter Hurst, 242 St. Vincent Street, Glasgow, Registrar for Glasgow.

GLASGOW.

Allocation of the Surplus under Medical Benefit.

At a meeting on the 10th inst. of the Glasgow Burgh Insurance Committee, the subject of the surplus on the head of medical benefit and its allocation was again discussed, but no solution of the question was reached. Mr. Hamilton Brown moved the approval of the minutes of the sub-committees who had been considering the subject. These recommended that the unappropriated insured persons should be allocated equally among the practitioners on the panel whose lists do not exceed a maximum of 1,500; so however, that no list should be increased beyond that maximum, that payment should be made in full of all "identified" and "unidentified" medical forms, after exclusion of duplicates, etc.; and that the balance remaining in the panel fund, after meeting the payments to the practitioners on the panel as above, should be distributed among those practitioners proportionately to the number of persons allocated to them and to the period they have been on the panel, on the understanding that the payment was to be in full settlement of the medical accounts for the year. After discussion, it was decided to send the whole matter back to the Medical Benefit Sub-committee for further consideration.

The Society of Alchemysts.

At a meeting on the 11th inst. of the "Honourable Alchemysts" in Glasgow University, Mr. F. Soddy, F.R.S., described the most recent ideas in connection with the structure of the atom. He spoke of the work of Mosley in Professor Rutherford's laboratory in Manchester, and pointed out that this, taken in conjunction with previous work on the characteristic rays of different elements and with the work of Mr. Fleck (who gave an address at the same meeting), led to the belief that the atom was composed of three concentric spherical shells. The innermost one consisted of the "nucleus," containing positive and negative charges concentrated in a sphere the diameter of which was the 10,100th part of the diameter of the atom. The intermediate shell consisted of electrons, which gave rise to the characteristic gamma radiations. The chemical properties of the substance were determined by the number of electrons in the outermost shell.

BELFAST.

Belfast Medical Guild.

A special general meeting of the Belfast Medical Guild was held in the Medical Institute, Belfast, on the 5th inst. The object of the meeting was to ascertain the feeling of the profession as to the advisability of continuing the Guild. In the absence of the President, the chair was taken by Mr. Andrew Fullerton. On account of the establishment of the local Medical Committee in connection with the Insurance Act and the increased interest taken in the meetings of the Belfast Division of the British Medical Association, it was felt by some that the need for the Guild no longer existed. In addition, the large number of meetings in connection with the various medical organisations have proved a tax upon the time of the busy practitioner, and it was thought that it might be wiser to concentrate his energies upon the older organisations. After full discussion, however, it was finally decided to continue the Guild, keeping in view the more social side of professional life until a crisis such as that through which we have just passed should arise, when the Guild should again assume more of a medico-political function. The new lines upon which the Guild will be run will be discussed at the annual meeting, to be held at the beginning of the year.

Belfast District Lunatic Asylum.

At a meeting of the Committee of the above institution, held on the 8th inst., Dr. Norman B. Graham was appointed Assistant Medical Officer, in place of Dr. Patrick, resigned. Dr. Patrick has been Assistant Medical Officer for the past seventeen years, and has just been appointed Medical Superintendent of Omagh Asylum. We congratulate Dr. Patrick on his well-earned promotion, and we believe that the interests of Omagh Asylum are safe in his hands.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

FINANCIAL REFORM IN THE BRITISH MEDICAL ASSOCIATION.

To the Editor of The Medical Press and Circular.

Sir,—Lately we have had several leading articles upon the B.M.A. I have always read them with interest, though I cannot always say with approval. You tell us that the loss of the Association would be irreparable; and I entirely agree with you. Has it ever occurred to you that you may—unwittingly, I know, be assisting to bring about its downfall? Have you no readers who are not members of the Association and who may be in doubt whether they should join the Association or not? Do you think that, after reading your articles, they would decide to join; or do you think that their attitude would rather be this: "I thought of joining the B.M.A., but I am convinced that it would be a foolish action on my part to join so badly managed an Association"?

With regard to raising the subscription to £2 2s. Is it too much to ask a medical man to pay £2 2s. a year to have his life interests guarded by the Association? Because, after all, the majority of us have to live by our profession. What was the result of the roll call: Ayes, 131; noes, 42; not voting, 2? Now, these representatives had been instructed how to vote by the members of their divisions—a point worthy of note.

My own personal opinion is, and has been since the dawn of the Insurance Act, that the subscription should have been raised then, to assist the funds which were so strained by the fight: which would have been won if the members of the Association had hung together. Do not you think that, if you mean that the loss of the B.M.A. to the profession would be irreparable, instead of publishing the sentence that the raising of the subscription is an astonishing ineptitude and that it will lead to a large number of resignations, it would have been wiser to have helped the Association by remarking that no loyal member of the Association who has the best interests of his profession at heart would think of resigning because he will be called upon to pay 17s. more per annum—which works out at about 3¾d. a week—for his privileges.

I am pleased to note that the advertisement rates have been raised. This is a step in the right direction. I am a member of the B.M.A. For many years I have been a subscriber to the Medical Press and Circular as well as a contributor, and I hope that if you publish another article on the B.M.A. it will throw oil on the troubled waters and not stir them up and lash them into fury. Let me suggest as a text, "The Loss of the British Medical Association to the profession would, in our opinion, be irreparable." Point out the various ways in which it would be irreparable, and stimulate your readers to support it loyally in every way. Furthermore, you can do unlimited good to the Association by firing with enthusiasm those members who take no personal interest in the work of the Association, but who, nevertheless, grumble if things do not turn out as they expected they would.

I write this letter in no carping spirit, but because at the present time the Association requires all the sympathy possible of its well-wishers.

I am, Sir, yours truly,
S. J. Ross.

Bedford, December 10th, 1913.

[It would be unnecessary to point out to so distinguished a medical critic as Dr. Ross that it is sometimes necessary to be frankly and even apparently brutally outspoken in order to save a sick man. That is the spirit of friendly candour in which our criticisms were made. We note that our esteemed correspondent has not attempted to analyse the issues raised as to the need of domestic and financial reform of the B.M.A., but has rather addressed himself to an *ad misericordiam* appeal to us to avoid words of harshness, and to hope for better things in some hazy future. Why should not plain business methods rule our medical organisations?—Ed. M. P. and C.]

To the Editor of The Medical Press and Circular.

Sir,—If you are not already aware of it, your publisher can inform you that I have been a subscriber to the Medical Press for upwards of 25 years. For more than half that time I have also been a member of the B.M.A. I have noticed all along that you criticise the Association from a detached standpoint. You let us see ourselves as others see us. We ought to be indebted to you for this service. I am convinced that no individual or small party within the Association is entirely to blame for any of the evils which at present afflict it. The situation is due solely to the long-continued apathy of the great mass of members. It was stated at the Representative Meeting that not more than ten per cent. of members ever attend local meetings. In my own division, except during the Insurance Bill crisis, a five per cent. attendance has been the average. It has never been possible to rouse the interest, much less the enthusiasm of members on any question of Association policy. I have stated in your paper more than once, and I now repeat, that the Association has for many years filled the part almost solely of a co-operative society for the publication of a medical journal. This work has almost completely absorbed the forces and resources of the Association. A journal has been issued to members at a cheap price, but it has been produced at a stupendous cost. The paper is now four times too big. It needs an effort to lift it; it is fatigue to read it. Every part of it might be cut down with enormous advantage to the great bulk of members, the general practitioners. With a circulation of 25,000 a week, the advertisements would still come in. If the charge per page were increased the number might diminish, but advertisers would be satisfied with a part instead of the whole of a page, and there would be more chance of their announcements being seen. It is doubtful whether one per cent. of readers now ever glance through the huge mass of advertisements. The *Journal* ought to yield a profit income of at least £10,000 a year. A majority of the small meeting of my division supported the proposed increase of the subscription. I shall certainly not go on if the financial affairs of the Association do not undergo the overhaul which you insist upon. A very large proportion of members will, I am sure, adopt a similar attitude.

I am, Sir, yours truly,
An Obscure Member.

December 12th, 1913.

THE NATIONAL MEDICAL UNION.

To the Editor of The Medical Press and Circular.

Sir,—Your leading article and notes in your issue of December 10th have unwittingly done injustice to the National Medical Union of non-panel men.

The only question at issue at the Conference was the admission of non-panel men on Local Medical Committees, and possibly the signing of the contracting-out form 43 I.C. There was no difference of opinion with regard to the condition of membership—that members must be absolutely non-panel; that is to say, no medical man whose name is on a panel list or who has any connection with the panel indirectly can be a member of the Union. This does not admit of any side-door issue by which a panel man can enter.

If you will read the resolution again—and I will repeat it here: "That the principal condition of membership of the new federation shall be that applicants for membership shall not be on the panel directly or indirectly, and that all local associations shall have power of autonomy"—you will see that the words "shall not be on the panel, directly or indirectly," must exclude every form of panel practice.

It is possible that certain local associations, having autonomy, will go further and make their condition of membership absolutely non-service, and this the resolution allows. Others may allow latitude to their members to assist the Act by unpaid service on committee, etc.

It is not yet desirable to consider the question of policy. When the organisation of the Union has been completed a strong policy will be formulated,

I am, Sir, yours truly,
E. Arthur Dorrell,
Hon. Secretary.

Waldorf Hotel, London.
December 11th, 1913.

[The question raised by our correspondent hinges on the meaning of the phrase "absolutely non-panel." Men who have signed Form 43 have agreed to treat contracted-out patients under the National Insurance Act under certain contingencies. Men who have thus signed may or may not be regarded as indirectly on the panel—anyway, they are eligible for the Non-panel Union. Then again, local committees, apparently, may admit men on the panel if they see fit. If that be the correct interpretation it opens a side-door for panel men, as stated in our editorial.—Ed. M.P. and C.]

FAITH HEALING AT UNIVERSITY COLLEGE.

To the Editor of The Medical Press and Circular.

Sir,—The enclosed private and confidential statement exemplifies what may be indirectly the tragic results of performances such as that which was conducted at University College last month, and reported in the *Times* and all the leading papers in a fashion calculated to confuse and mislead the credulous and suffering public. The only person who has come out of the business without blame is Lord Sandwich. He disarms criticism by the statement that "he does not pretend to medical or surgical science." He apparently looks upon himself as an instrument chosen by Divine Providence as a twentieth century worker of miracles. "There are few serious maladies he has treated without success"; he "has never failed to relieve people in agonies of pain." The erstwhile members of the committee of the Psycho-Medical Clinic could surely have needed no analysis of Lord Sandwich's psychology in determining his fitness to take the chair at their inaugural meeting; they surely could not have needed any reminder of the mischief that might result from the promulgation of his views uncriticised or unrefuted by distinguished medical members among his audience. Why did not Dr. Constance Long or Dr. Maurice Craig perform what seems to have been their bounden duty on this occasion? What is the use of the belated disclaimer of Professor Spearman in the *Times*—a disclaimer so obscurely worded as merely to make popular confusion worse confounded. What is the use, from the public point of view of resignations announced in medical papers only, when a world-wide publicity has been given to proceedings to which eminent doctors falsely seem to have given sanction, but which they, in fact, most strongly object to?

I am, Sir, yours truly,
Scrutator.

December 13th, 1913.

[If there existed a Public Prosecutor charged with enforcement of the law, the facts stated in the document submitted to us by our correspondent would at once result in a charge of manslaughter against the unqualified practitioner involved. A large number of the victims of quackery of every kind are led on to perfectly preventable death whilst relying upon useless methods in cases easily amenable to scientific treatment.—Ed. M.P. and C.]

OBITUARY.

Dr. J. O'DONOVAN, KINGSTOWN.

With much regret we record the death of Dr. J. O'Donovan, F.R.C.S.I., of Kingstown, Co. Dublin. He was at an advanced age, and had been in failing health for some months past. Dr. O'Donovan practised with success in Kingstown for many years, and enjoyed to a remarkable extent the confidence of the public and of the profession. He was a man of high medical skill, and, more important, of high character, kindly and honourable in all relations of life. He was specially noted for his kindness to the poor and his unostentatious charity.

MR. SYDNEY JONES, OF LONDON.

We regret to record the death of Mr. Sydney Jones, M.B.Lond., F.R.C.S., which took place last week at Balham, at the age of 82, one of the best-known of the London surgeons of the latter half of the last century. After a distinguished career as a student in the Medical School of St. Thomas's Hospital, he was in 1860 appointed Assistant Surgeon to the hospital, was given charge of the ophthalmic department, and became Lecturer on Descriptive and Surgical Anatomy and Ophthalmic Surgery. In 1871 he became Full Surgeon with charge of beds and Joint Lecturer on Systematic Surgery in the Medical School. This post he occupied for the full period of 20 years, when he retired from the hospital and was made a consulting surgeon. In addition to his strenuous work at the hospital, he became a member of the Council of the Royal College of Surgeons of England and an Examiner in Surgery to the Royal College of Physicians of London. After retirement from the hospital, when he had more leisure, he became an Examiner in Surgery to the University of Glasgow. Mr. Sydney Jones was known as a surgeon whose opinion was always sound, while his help was in much request in consequence of his brilliancy as an operator. His contributions to surgical literature were not numerous, but were essentially of a practical kind. He edited a pathological catalogue of the St. Thomas's Hospital museum, and from time to time made contributions to the hospital reports, among the most important of which were papers on the excision of joints. Mr. Jones was Consulting Surgeon to the London Throat Hospital, the Surrey Dispensary, the Royal South London Dispensary, and to the Cottage Hospitals of Luton, Beckenham, and Hatfield Broad Oak.

LITERARY NOTES.

"Industrial Lead Poisoning" will be the title of a new work by Sir Thomas Oliver, to be published early in the New Year by Mr. H. K. Lewis. The book will be an elaboration of the lecture recently delivered at the Royal Institute of Public Health. The subject of lead poisoning will be dealt with mainly from the industrial point of view, and will include symptomatology, pathology and treatment of the disease. The same publisher announces also a second edition of Dr. Lewis Jones's book on "Ionic Medication," the fifth of Dr. Dudley Buxton's popular handbook on "Anæsthetics," and a fifth edition of Mr. Albert Taylor's "Sanitary Inspector's Handbook," also considerably enlarged.

* * *

Our old friend, "Hazell's Annual" for 1914, has appeared once again in due season. It is edited by T. A. Fyram, M.A., LL.D., and has been revised to November of the present year. Needless to say, the 29th issue of the "Annual" sustains the reputation of its predecessors, giving, as it does, a concise collation and review of the most recent topics of the day. There is no work of the kind, to our mind, better fitted for the library table of the medical practitioner. As a trusted book of reference, it has for many years past figured conspicuously in the consulting-room of the present writer. There is no need to recapitulate the many virtues of "Hazell." Not the least among them, by the way, is the copious index, the very reins to the literary writer. The price is moderate as ever—to wit, 3s. 6d. net.

* * *

"The Medical Who's Who" for 1914, published by the London and Counties Press Association, Ltd., 39, King Street, Covent Garden, W.C., is a far more representative biographical directory than the preceding issues. That this is so is due to the tactful and enterprising action of the publishers, for they have sent forms of particulars to every registered medical practitioner in Great Britain and Ireland. A new and welcome feature of the work is an alphabetical list of towns, with the names of resident practitioners, whose names and addresses appear in this edition, which will be found at the end of the volume. The publishers state generously that particulars are inserted "free from any condition." Some space might be economised if a limit of one column were imposed upon the entries, for all essential biographical details can usually be stated well within this space. The inclusion of the names of dental practitioners not in possession of a medical qualification raises the question as to whether it might not be better to place these in a separate list or even to publish them in another volume. It is to be hoped that in future every medical practitioner will return the form of particulars and thus assist in rendering this excellent publication truly representative of the profession.

MEDICAL NEWS & PASS LISTS.

The Opening of the Empire Hospital.

The Empire Hospital for Paying Patients, Vincent Square, S.W., was opened on Monday last for inspection previous to the admission of patients. The hospital is designed for the reception of persons of moderate means who cannot afford to enter an expensive nursing home, but who do not feel justified in accepting the charity of free institutions. It has the distinction of being the first and only institution of its kind in England. The directors are Lieutenant-General Sir James Bevan Edwards, Lord Anglesey, Lady Scarbrough, Mr. Harvey Hilliard, Mr. Benjamin Morgan, and Mr. Herbert Samuelson. The Hon. Advisory Medical Committee includes Sir Francis Laking, Sir Victor Horsley, Dr. Arthur Latham, and Mrs. Dacomb Scharlieb.

The hospital, which is constructed on the most modern hygienic principles, and in which every patient has a separate room, contains two operating theatres, one for minor and one for major surgical work, while a room has been set apart for the operative treatment of septic cases. The electric installation is complete, and comprises an X-ray room, a Nauheim bath, Dowsing radiant heat, electric light, and hydro-electric baths. Surgical, medical and obstetrical cases are received. Any physician, surgeon, or general practitioner may send his patients to the hospital, and patients are attended, in all cases, by their own doctors. A feature of the hospital is the roof garden for convalescents.

The Duke of Portland's Gift to a Hospital.

It is announced that as a thankoffering on the coming of age of their elder son, Lord Titchfield, next year, and to mark their silver wedding, the Duke and Duchess of Portland have written to the Committee of Management of Mansfield Hospital asking them to accept a sum of between £4,000 and £5,000 to liquidate the debt on the King Edward memorial wing which is being built there.

Sad Death of a Medical Man.

The death took place, on December 10th, at Tetford, near Horncastle, of Dr. James Campbell Grey, in tragic circumstances. In his house, after lunch, he took a dose of strychnine by mistake. He at once realised his error and called upon a woman, who was cleaning, to mix him an emetic, but finding this had not the desired effect, he told her to wire to the doctors at Horncastle, stating, "Come at once; have taken strychnine by mistake." The woman did so, but on her return found he was dead. Dr. J. W. Jessop, Dr. H. A. Howes, and Dr. F. Withers, of Horncastle, afterwards arrived by motor.

The deceased was L.R.C.P., L.R.C.S.Edin., and was educated at Queen's College, Belfast. Born in 1850, he commenced practice in 1874, at Wragby, and in 1877 went to Tetford, where he was panel doctor, public vaccinator, and poor-law medical officer. He was a large property owner.

The Women's Hospital for Children.

The first ward for in-patients has now been opened in the Women's Hospital for Children, 688 Harrow Road, W., the only children's hospital in London staffed by medical women. The hospital has been founded to provide general medical and surgical treatment for the sick children of a crowded neighbourhood, and to give medical women a children's hospital in which they hold staff and residential appointments and have an opportunity of specialising in children's medicine. The hospital opened a general out-patient department last year, and a dental department will shortly be opened and a woman dentist appointed. Over 6,000 out-patients are on the books, and the Committee have already collected £4,000 towards the building fund.

Special Insurance Act Inquiry.

In view of complaints as to the medical attendance and treatment for insured persons, the Association of Approved Societies, which represents a membership of over four millions, has recently appointed a special committee, under the chairmanship of the Earl of Lytton, to conduct an investigation into the whole subject, with a view to publishing a comprehensive report early in the New Year. The committee is sending a letter to panel doctors, medical officers of health, insurance committees, approved societies, hospitals, charitable institutions, and other quarters interested, containing over 100 questions. It is understood that the Government intend to introduce an Insurance Act Amendment Bill early next session, dealing with the position of the deposit contributors.

School Dental Clinics—Announcement by Nationa Board.

The Commissioners of National Education desire to call the attention of managers and teachers of National Schools to the facilities which are now afforded by their regulations for the dental treatment of school children. Schemes for the dental examination and treatment of pupils may be submitted to the Commissioners, who are prepared to contribute half the cost of the necessary clinical equipment and half the cost of the treatment within certain limits. A successful beginning has been made already in different districts throughout the country by the inspection and treatment of the teeth of the children of the National Schools, but as the Commissioners have considerable funds still at their command for the purpose, they would wish to see a much wider extension of the provision. They are anxious that all persons interested in the National Schools, and especially the teachers, should endeavour to give effect to their wishes, and that as much as possible of the funds at their disposal for dental treatment during the current financial year should be utilised before March 31st, 1914. National teachers are reminded that under Rule 128 (e), the minimum time constituting an attendance may include any time occupied by visits to dental clinics during school hours. In the absence of a general scheme of medical inspection which the Commissioners would desire to see established, the care of the teeth of the children is an essential of all school hygiene.

King Edward's Hospital Fund for London.

A meeting of the Governors and General Council of King Edward's Hospital Fund for London for the purpose of awarding grants to the hospitals, convalescent homes, and consumption sanatoria for the present year, was held last week at St. James's Palace. It was announced that the Fund would benefit by about £465,000 in all under the will of Sir Julius Wernher; also that the difference with St. George's Hospital had been settled.

The Royal College of Surgeons of England.

The following candidates have been admitted Fellows of the College:—

C. W. Archer, M.A., L.R.C.P.Lond., M. Bates, B.A., M.B.Oxford, F. G. Bell, M.D.Edin., T. H. C. Benians, L.R.C.P.Lond., S. E. V. Brown, M.B. Otago, G. H. Chisnall, M.B.Lond., T. B. Davis, M.D. and M.R.C.P.Lond., F. H. Diggle, M.B. Manch, N. Duggan, M.B.Manch., P. J. Franklin, L.R.C.P.Lond., J. S. Jobson, B.A., M.B.Camb., N. C. Lake, M.D.Lond., A. L. Moreton, M.B.Lond., J. T. Morrison, M.B.Edin., C. T. Neve, M.B.Lond., S. B. Radley, M.B.Lond., E. H. Rainey L.R.C.P. Lond., R. A. Ramsay, B.C.Camb., L.R.C.P.Lond., E. Rayner, M.B. Camb., J. L. Ritchie, Lieut. R.A.M.C., M.B.Birm., R. M. Rowe, M.A., M.D.Edin., E. G. Schlesinger, M.B.Lond., W. A. Sneath, M.B. Manch.

The following candidates who are not Members of the College have been also admitted Fellows:—

J. S. Bookless, M.B.Lond., A. Gibson, M.B.Edin., J. Gow, M.B.Manch., R. C. MacQueen, M.B.Edin., J. C. Stewart, M.S., M.D.Durham.

The following candidates have been admitted Licentiates in Dental Surgery:—

L. Alabone, H. J. F. Alexander, R. H. Basker, F. E. Bendix, C. G. Bowen, R. G. Bradley, A. A. Brown, W. A. Bulleid, A. F. Camp, J. P. Cocker, L. C. Cohen, R. G. Cowell, F. A. Craine, W. A. Crane, E. Dinsmore, C. H. Edwards, P. W. Flook, W. T. Flooks, W. K. Fry, M.R.C.S., V. A. F. Greenish, F. C. Harrison, C. J. O. Jensen, E. E. Johnson, W. S. Johnstone, N. H. Kettlewell, S. McCallin, P. S. McFarlane, W. R. Matthews, L. T. Montgomery, N. Mulliner, C. H. Oliver, J. S. Palmer, H. Peters, K. C. Pitman, F. R. Rice, R. H. Rix, G. H. H. Russell, G. V. Saunders, F. S. Simpson, H. L. Smith, R. C. W. Staley, T. W. Stark, S. Stevens, E. W. Thomas, H. Treleven, A. B. G. Underwood, M.R.C.S.Eng., R. McKenzie Veale, G. H. Warner, G. L. Wilkinson, M. L. Williams, H. V. Wolfenden, H. Wolff, P. B. Wood, L. D. Wright, M.R.C.S.

The following candidates have been admitted Members of the College:—

A. S. Cohen, and T. O. Shah.

University of Oxford.

In a congregation held on December 13th, the following degrees were conferred:—

D.M.—E. P. Poulton, Balliol; M. B. Baines, Exeter; A. J. Jex-Blake, Magdalen.

B.M.—J. A. G. Sparrow and A. H. Southam, Christ Church; R. O. Ward, Queen's; G. T. Herbert, Christ Church; J. F. Venables, Magdalen.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Dr. T. S. (Beds).—The Plunket Society of New Zealand is, so far as we are informed, a society for educating the upper classes in the methods for the prevention of infant mortality. It is stated that there are now 70 branches of the society covering an extent of 1,000 miles.

NOT THAT!

Lecturing the other day under the auspices of the National Health Society on health, fatigue, and repose, Professor Stirling incidentally referred to what he called sermon-time somnolence.

If we snooze in church 'tis because we're tired—
  Because the air is a trifle hot—
Because there's a somnolent feeling round,
  Or the building's ventilated not—
Because, perhaps, we are sitting still
  (Oh for a friendly nudge or shake)—
Because (humanity's so perverse)
  One ought, of course, to be wide awake—
Because the day is a day of rest
  (After the week a welcome lull),
And many another reason why;
  But never because the discourse is dull.

The Western Mail.

A. L. O. A. (London).—The subject is not of sufficient interest to our readers to warrant insertion in the present exceptional demand on our space.

M.B. (South Hackney).—We cannot trace the original paper to which our correspondent refers. A comprehensive article on cardiovascular symptoms and their treatment in diabetic coma appeared in the *Berlin Klin. Woch.*, No. 31, pp. 1421-1464 (1913).

Meetings of the Societies, Lectures, &c.

Wednesday, December 17th.

Royal Society of Medicine (Section of the History of Medicine) (1 Wimpole Street, W.).—5 p.m.: Lecture: Professor Richard Caton: Health Temples in Ancient Greece and the Work carried on in Them. Illustrated by the epidiascope. (All members of the Medical Profession, including Students, whether Fellows of the Society or not, are invited to attend this meeting.)

British Oto-Laryngological Society (11 Chandos Street, Cavendish Square, W.).—4.30 p.m.: Meeting.

Royal Microscopical Society (20 Hanover Square, W.).—8 p.m.: Paper: Mr. C. Beck: The Binocular Microscopes of the Past and a New Form of the Instrument.

Thursday, December 18th.

Royal Society of Medicine (Section of Dermatology) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. G. Pernet, Dr. J. M. H. MacLeod, Dr. Knowsley Sibley, Dr. S. E. Dore, and others.

Friday, December 19th.

Royal Society of Medicine (Section of Electro-therapeutics) (1 Wimpole Street, W.).—8.30 p.m.: Paper: Dr. Max Heiner (of St. Joachimsthal Sanatorium): Modern Radium-Therapy in all its Branches.

Royal Society of Medicine (Section of Balneology and Climatology) (1 Wimpole Street, W.).—Members of this Section are specially invited to attend the Meeting of the Section of Electro-Therapeutics.

Society of Tropical Medicine and Hygiene (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Paper: Dr. C. M. Wenyon: Kala-Azar in Malta, with some Remarks on the Various Leishmaniases. Demonstration: Dr. H. B. Fantham and Dr. J. G. Thomson: Cultures of Piroplasma Canis. Malarial Culture Specimens: Dr. D. Thomson. Paper: Dr. J. O. Shircore and Mr. P. H. Ross: Epidemic Cerebro-spinal Meningitis in Nairobi.

Appointments.

Fairbank, H. A. T., M.S.Lond., F.R.C.S.Eng., Surgeon to In-patients at the Hospital for Sick Children, Great Ormond Street.

James, W. Warwick, F.R.C.S.Eng., L.D.S., Assistant Dental Surgeon to the Middlesex Hospital.

McLean, Alex. G., M.B., Ch.B.Aberd., House Physician at the West End Hospital for Diseases of the Nervous System.

Rivera, F. E., M.R.C.S., L.R.C.P.Lond., House Surgeon at the Eye Hospital, Oxford.

Robertson, W. A., M.B., Ch.B.Edin., Honorary Surgeon to the Hartlepools Hospital.

Vacancies.

Oxford County Asylum, Littlemore, near Oxford.—Assistant Medical Officer. Salary £200 per annum, with apartments, board, and washing. Applications to the Medical Superintendent.

Joint Counties Asylum, Carmarthen, South Wales.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to the Medical Superintendent, Asylum, Maidstone.

County Asylum, Chester.—Third Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent

Nottingham General Dispensary.—Resident Surgeon. Salary £220 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

Corporation of Birmingham.—City Hospital, Lodge Road.—Assistant Resident Medical Officer. Salary £150 per annum, with board, residence, etc. Applications to the Medical Superintendent.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Kidsgrove (Stafford), Redhill (Surrey), Blairgowrie (Perthshire), Moville (Co. Donegal), Newbury (Berkshire).

Births.

Maguire.—On December 13th, at Fulwood, Kew Gardens, to Dr. and Mrs. Maguire—a son.

May.—On December 4th, at Karrageen, Marlborough, S. Devon, to Dr. H. and Mrs. O'Hara May—a daughter.

Mayou.—On December 11th, at 51, New Cavendish Street, London, the wife of M. S. Mayou, F.R.C.S., of a daughter.

Odell.—On December 14th, at "Ferndale," Torquay, the wife of William Odell, M.D., F.R.C.S., of a son.

Wood-Hill.—On December 6th, at Staithe House, Beccles, to Dr. and Mrs. Wood-Hill—a daughter.

Marriages.

Ashley—Lavington.—On December 11th, at the Cathedral, Brisbane, Thomas E. Ashley, M.R.C.S., L.R.C.P.Lond., of Brisbane, second son of R. W. Ashley, Esq., J.P., and Mrs. Ashley, of Woodville, Stoke Bishop, Bristol, to Muriel, second daughter of Mr. and Mrs. Cyril E. Lavington, of Druid Stoke, Stoke Bishop, Bristol. (By cable.)

Crabb—Newnham.—On December 11th, at Holy Trinity, Dorchester, Robert Lawson Crabb, M.D., B.S.(Lond.), of "Strathfinta," Esher, Surrey, son of James Crabb, M.A., M.D., of "Craigilea," Parkhurst Road, N., to Alice Muriel, elder daughter of Mr. and Mrs. H. S. Newnham, of Rodlands, Dorchester.

Fairbairn—Stuart.—On December 9th, at St. Simon Zelotes, S.W., John Shields Fairbairn, M.B., F.R.C.P., F.R.C.S., of 42, Wimpole Street, W., to Elma, second daughter of the late J. P. Stuart, of Clanallan, Elgin, N.B.

Tatchell—Fraser.—On November 29th, at St. Paul's Westbourne Grove, Percy Tatchell, M.R.C.S., L.R.C.P., youngest son of Edward Robert Tatchell, and of the late Mrs. Tatchell, of North Bank, Sea View, Isle of Wight, and 73, Holland Park, W., to Miriam, youngest daughter of the late James Fraser, of Lloyds, and of Mrs. Fraser, of 16 Prince Edward Mansions, W., and Craighill, Kessock.

Ticehurst—Cross.—On December 8th, at St. Alphege, Greenwich, Norman F. Ticehurst, M.A., M.B., B.C., F.R.C.S., eldest son of A. R. Ticehurst, J.P., of Huntbourne, St. Michael's, Kent, to Ivy, second daughter of Henry Cross, of Greenwich, and granddaughter of the late G. R. Cross, Sen., of Taplow, Bucks.

Deaths.

Footner.—On December 11th, at Westcliff-on-Sea., Edward Footner, M.D., Brigade Surgeon, of 8, Hanover Terrace, W., second son of the late G. B. Footner, solicitor, Romsey, Hants.

Landon.—On December 7th, at 169 High Street, Homerton, N.E., Edward Landon, M.R.C.S.Eng., L.R.C.P.Edin., late Captain R.A.M.C., aged 58.

Skelton.—On December 8th, at his residence, Overnhill, Downend, near Bristol, Henry Skelton, M.D., M.R.C.S., M.R.C.P., aged 71.

Woods.—On December 10th, at Dashwood House, Ramsgate, from septic poisoning, Frank Woods, M.R.C.S., L.R.C.P., L.S.A.

Young.—On December 10th, at 122 Herrington Street, Sunderland, Thomas Beveridge Young, L.R.C.P. and S.Edin., L.F.P.S.Glasg., aged 44.

Macartney.—On December 6th, at Cinderford, Richard Macartney, L.R.C.P. and S.Edin., L.M., aged 52.

Duke.—On December 7th, at Cheltenham, Allen Forrester Duke, L.R.C.P.Edin., and L.M., aged 50.

Keith.—On December 4th, suddenly, at Heolycyw, Dr. W. G. Neill Keith, aged 48.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, DECEMBER 24, 1913. No. 26.

NOTES AND COMMENTS.

Admission Diagnosis.

IN spite of the general excellence of administration of our great voluntary hospitals, we are reminded from time to time that there is still room for improvement. It sometimes happens, for instance, that a patient is refused admission and sent away with some critical or mortal condition unrecognised. Last week a London inquest disclosed an unfortunate incident of the kind at the new King's College Hospital, Denmark Hill. A mother took a five-weeks old baby to that institution, and, according to her statement, was told by the porter to bring the child at some day later. She was later sent to the casulty ward, where another porter told her to bring the baby on a particular day (Friday). The child had developed a skin rash, and was admitted eventually at the Evelina Children's Hospital, where it died two hours after admission. The jury returned a verdict of death from natural causes, and added a rider that they were dissatisfied with the conduct of the hospital porter. If the facts be as stated in the newspaper reports, their dissatisfaction is likely to be shared by a number of other people. It seems incredible that at any great hospital the highly skilled and responsible duty of admitting or sending away applicants should be relegated to a porter. Nor can it be believed that any such method is sanctioned at King's College Hospital. At the same time it seems clear that there is some little laxity in management, otherwise an accident of the kind under notice could hardly have occurred. In most large general hospitals, London or provincial, there is room for a good businesslike department, properly staffed, for the rapid, careful, and systematic examination of all applicants. One great source of trouble is an overworked and under-manned resident medical staff.

A Dental Students' Strike.

A GENERAL strike has recently taken place amongst the students of dental surgery at Berlin, Munich, Leipzig, and some half-dozen other universities. Their grievance was that the academically-trained student, so far as the public was concerned, was indistinguishable from the practitioner who had undergone merely a technical training as an apprentice. It appears that recently the non-academic dentists have been admitted to State Insurance practice, and are to be given a kind of official certificate of efficiency. In order to distinguish the university-trained dental surgeon, who has to undergo a prolonged training and pass three examinations, the academic students demand the institution of a new degree, namely, that of "Doctor of Dental Surgery." The strikers refused to attend lectures until the authorities agreed to give careful consideration to their demand. At Freiburg, the Faculty of Medicine has promised to communicate with the Government in support of their demand, and the Prussian Chamber of Dentists has consented to reconsider the question. The students certainly appear to have justice on their side, for if the State has recognised the necessity of a legal examination and qualification in dentistry, surely it should not admit to dental practice persons who have not submitted to a similar course of training and of examination tests of proficiency. A dental surgeon must attain a certain scientific standard of knowledge, and the State cannot consistently recognise untrained dentists as being in the same category.

Our Own Untrained Dentists.

THE situation finds a kind of echo in the United Kingdom. The State has instituted a curriculum and examinations for good standard of legal dental qualification. On the other hand, it offers no obstacle whatever to any ignorant person who may choose to set up in practice as a dentist. The result is that tens of thousands of unqualified persons compete with the orthodox dental surgeon who has acquired his credentials from the State at a considerable expenditure of time, labour and money. The situation is farcical. The obvious underlying reason that prompted the State in insisting upon the adequate scientific training of dentists is the protection of the public. What greater failure could there be than that of a system which permits Dick, Tom and Harry to fit up a surgery and workshop and set up as practising dentists? Possibly the scope of the Royal Commission into patent medicines and unqualified practice might include irregular dentistry. The Commission, however, has fallen flat, and from the first it was predicted in some quarters that no other result was looked for officially. So the dental question will probably have to wait a few more generations for settlement, like the older problem of medical quacks and quackery.

Bengal Excise Folly.

THE Bengal Excise has recently performed a feat of more than usual stupidity, even for Indian officialdom. India has very properly determined to root out, as far as possible, the pernicious cocaine habit, which has taken a firm hold of her people. To that end the Excise have been exercising the greatest vigilance both over shipping and over the town of Calcutta itself. As the result of this activity some £25,000 worth of cocaine was seized, and, incredible as it seems, the whole lot was forthwith thrown into the river Hoogley. This fatuous and wanton destruction reminds one of the silly way in which contraband tobacco was burnt in London in a furnace known popularly as the "King's Tobacco Pipe." All tobacco now seized by the British Customs is bestowed in useful directions—such as naval hospitals, and so on. Why should not the Bengal Excise follow a sensible example of that kind? Cocaine is small in bulk, and the whole £25,000 worth could have been sent from Bengal to London Dock at a trifling cost. Here, in England, it would have been used for legitimate drug purposes. It might, for instance, have been handed over to Mr. Winston Churchill, with a view of somewhat reducing the inordinate naval expenditure. The richest empire in the world cannot afford to throw away wealth in the reckless fashion adopted by the Bengal Excise. It is to be hoped the Indian Government will take steps to put an end to such stupidity.

Surgical Operations and the Children's Act.

The frequency of the occurrence of such abnormalities as adenoids and enlarged tonsils in children has been made more apparent of late years since the introduction of the system of school medical inspection. Many of the defects so discovered are capable of being remedied by very simple operations. The removal of vegetative growths in the naso-pharynx, as every medical man knows, results in nothing but good to the child. The airway is cleared, respiration becomes freer, the blood is thereby better aerated, and a host of troublesome minor reflex phenomena disappear shortly after the little operation, to say nothing of the improvement in the mental condition resulting from the relief of the deafness. Only a short time ago it was decided in the High Court by Mr. Justice Darling that a parent, who refused to allow an operation on his child for adenoids, if considered necessary for health reasons by a medical man, was guilty of "culpable neglect," within the meaning of the Children's Act. Such a side issue as the possible co-existence of the condition known as status lymphaticus should not be allowed to question the wisdom of such a decision, for no one except a medical man can form any judgment as to the advisability or otherwise of operation, not only in cases of adenoids, but in all morbid conditions of childhood capable of being relieved by surgery. In doubtful cases where an operation may or may not do good, the parents may rightly be given the final choice, but where it has been shown that operative interference is the best form of treatment, then the decision should rest with the medical man, and failure to comply with this should constitute negligence under the Act.

Patients of Moderate Means.

Last week a new nursing home was opened in London, under the name of the Empire Hospital, for paying patients. It is an up-to-date, modern building, fitted with operating theatre, X-ray installation, various kinds of baths, and so on. The hospital, so it is announced, is designed for the reception of persons of moderate means who cannot afford to enter an expensive nursing home, but who do not feel justified in accepting the charity of the free institutions. The terms on which patients are admitted range from £3 to £10 per week, a fact that leads one to speculate on the definition of "moderate means" as it appears to the directors of this strictly businesslike venture. There is no pretence at philanthropy about the affair. The chief way in which this "hospital" differs from Guy's and St. Thomas's and other voluntary hospitals that receive paying patients is that the latter are using money subscribed for the benefit of the poor, and any profits go to the common fund of the charity. The Empire Hospital, on the other hand, is frankly commercial. So far as the medical profession is concerned, it does not enter into competition with them by appointing its own medical staff, but any medical man may attend his own patient, which is not the case in the voluntary pay wards. From a legal point of view it may be questioned whether the voluntary hospitals are not grossly violating the terms of their charters in what amounts to trading upon charitable funds. The Empire Hospital should be useful as a check on the exorbitant charges of many private nursing homes—but we imagine there is still room for a large lower-middle-class nursing pay hospital.

Third Party Examination.

Many riskss of unfounded charges of misconduct are inherent to the medical profession. Some are due to the baser motives, such as blackmailing or revenge, some to insane delusions, others to sheer credulity and lack of mental and intellectual balance. As a matter of fact, a certain number of these unpleasant episodes might be avoided by the exercise of a few simple precautions on the part of medical men. Let us take the point of the vaginal examination of young unmarried women, a proceeding out of which arise not a few of the serious charges brought against medical attendants. It is obvious that now and then such an examination may be absolutely necessary in the interests of the patient herself, inasmuch as it is essential to the formation of a correct diagnosis. Rarely, however, could the urgency of such investigation be so great as to prevent the possibility of securing the presence of a nurse or other female. The golden rule in this case would be, never examine *per vaginam* an unmarried woman except in the presence of a third party, and as far as possible extend the rule to all examinations of the kind even in the case of married women. Many blackmailing attempts would have been foiled at once by the adoption of some such plan. In the medical, as in other callings, to be forewarned is often to be forearmed.

LEADING ARTICLES.

THE KING EDWARD FUND AND THE SMALL HOSPITALS.

That the King Edward Fund is a noble institution goes without saying. It has secured for London a vast endowment for its voluntary medical charities. Money has flowed into the coffers of the great distributing agency founded by our late King like the proverbial water. On the authority of a leading hospital journal we learn that during the sixteen years of its existence the Fund has raised and distributed directly amongst the hospitals and convalescent homes upwards of one million and three-quarters sterling. This is an achievement of which any nation might be proud; and it is in no carping spirit that we once again call attention to what has always seemed to us to constitute a serious defect in the policy of the Fund—namely, its neglect of the small hospitals.

A few special institutions have been favoured with grants, some of them of large amount, but the general attitude of the King Edward and of the Sunday Funds has been one of absolute denial of recognition of the bulk of the smaller hospitals in any shape or form. It is difficult to think that those who gave their money to the King Edward Fund could have anticipated such a curtailment of its distribution. Of all the vast amount of relief to the suffering poor that is performed, year in and year out, by the London medical charities, a not inconsiderable portion is carried out in the smaller institutions. It would be nothing short of a calamity not only to the sick persons of the hospital class, but also to medical science, were the doors of those institutions to be closed. There is probably no finer scientific work done in the whole wide world than that carried on unostentatiously day by day in the special hospitals of London. Why, then, should they be deprived of a fair share of the money given by wealthy philanthropists for the support of the medical charities of London? The injustice to the donors inflicted by the exclusion of the smaller institutions could be swept away by a stroke of the pen. It probably arises, in the first place, from the fact that the King Edward Fund is governed by a non-representative body, on which are many members directly interested in the large hospitals. Within the last year or two some improvement has taken place in both the Funds under discussion with regard to the special hospitals. Many small and struggling institutions, nevertheless, are absolutely ignored. Even the lately instituted Alexandra Day Fund has adopted the same policy, and has given much to those that already have much, while the poor have gone empty away. Last year King George sent presents of game to some of the small hospitals that had never before been recognised by members of the Royal Family. It was hoped—and, indeed, believed in some instances—that this was a sign of better things to follow from the Fund which owes its origin to the late King Edward. Perhaps in the coming year it is not too much to hope that a few of its overflowing thousands may reach the smaller hospitals, whose resources have been taxed to the uttermost by the incidence of the National Insurance Act. Could the history of the special hospitals be revealed, in spite of all defects, the picture as a whole would be one of noble self-sacrifice and of duty nobly done in the face of many adversities.

CURRENT TOPICS.

The National Medical Guild.

At a meeting of the National Guild held at the Hammersmith Town Hall, on December 19th last, the policy of that body was clearly defined. Dr. Buttar, who presided, explained that the Guild was registered as a friendly society. In face of the collapse of the British Medical Association's fighting fund, he emphasised the importance of their own scheme. Mr. E. B. Turner dwelt on the value of a friendly society; its fighting fund would be on a safer basis. Then there was the possibility of representation in Parliament. He insisted upon the desirability of working harmoniously with the British Medical Association, a body that, from a legal point of view, it was practically impossible to form into a trade union. Dr. Percy Raiment, the general secretary, followed on the same lines, and gave an encouraging report of the growth of the Guild, with a rapidly increasing membership in the branches at Sheffield, Leeds, Manchester, Oldham, Rochdale, Plymouth, South Wales, Forest of Dean and various places along the South Coast. He claimed superiority for the Guild's method of forming a fighting fund —namely, that of making levies upon members when required, with the restriction that the amount thus levied should not exceed a certain maximum in any one year. A full report of this important movement will be found elsewhere in our columns.

Tuberculosis in England and Wales.

The tuberculosis returns show a formidable amount of the disease in England and Wales. Notification has naturally led to the disclosure of a large number of cases, the existence of which formerly could only be estimated roughly by a consideration of the mortality returns. During the year 1912 a total of 110,708 cases of pulmonary tuberculosis were notified in England and Wales, and of these no less than 33,392 were in London. So far as actual deaths were concerned, in England and Wales there were in 1911 (the latest year for which returns are available) 39,232 from pulmonary and 13,888 from other forms of tuberculosis. These figures show the magnitude of the task that lies before the sanatoria in ridding the State of this particular pestilence. They emphasise, moreover, the necessity of some comprehensive system—such as that provided by the National Insurance Act—for special sanatoria in which sufferers from the malady in an active form may be segregated. From an economic point of view, the loss to the community from this disease is enormous. It means that many valuable lives are lost. Many years of productive labour are lost; and the burden of the support of many invalids is cast upon the community. Now that some sort of control is exercised over tuberculous meat and milk, there is a reasonable prospect that the scientific preventive measures now adopted in the case of human tuberculosis may result in the practical extermination of the latter within the present generation. Much remains to be done, however, before that happy consummation is attained.

Medicine in Ancient Greece.

In lecturing before the Section of the History of Medicine of the Royal Society of Medicine last week on "Health Temples in Greece and the work carried on in them," Dr. R. Caton, of Liverpool, referred to the value of recent excavations in the region of Athens whereby the precinct of Amynos has been laid bare. It seems likely that both in medical lore and also in the superstition accompanying it, Greece was behind Egypt. Numerous minor deities or deified men appear to have taken the place of Apollo as healers and protectors of the sick. The inscriptions upon portions of the temple of Amphiaraos, near Oropus, in Attica, show that this sanctuary was founded in the fifth century, and that it was closed during the winter. The greatest centre of healing appears to have been that of Epidaurus, where there flourished a temple famous for its architectural features. On arrival at such a temple the patient would undergo ceremonial purification, including the payment of necessary fees, and on entering the Tholos he would offer bloodless sacrifice to the snakes, feeding them with honey cakes. He would bathe in the sacred fountain and offer sacrifices, while priests and physicians probably arranged diet and treatment. At night he would enter the Abaton with his bedclothing, and repose on one of the couches. At nightfall, when the lamps had been lit, the priest would enter and recite the evening prayers to the god. Silence would then be enjoined, the lights would be put out, and the priest would command all to fall asleep and hope for guiding visions from the god. As time went on superstition had a less share, and science a greater one, in the work of healing. The priest prescribed diet of a plain and simple kind, hot and cold baths, poultices, various medicaments such as hemlock juice, oxide of iron, hellebore, squills, lime water, drugs to allay pain, active gymnastic exercise, friction of the skin, counter-irritation, and bleeding; surgery also was practised. Apart from the cruel superstition which allowed neither birth nor death to take place in the holy precinct, the sick appeared to have been treated with kindliness and humanity, and were in general greatly benefited. The whole atmosphere of the place was helpful. The patients could sit and rest in the semi-circular seats provided while the more cultured occupied themselves in reading books from the library. The study of the innumerable votive offerings and commemorative tablets recording cures must have excited a beneficial faith and hope. The pure air of the mountains by night and day, the plain, simple diet, the rest and change, the medical treatment, and the beauty and charm of the place made Epidaurus intensely popular among the Greeks, and the early Christian teachers found it more difficult to displace Asclepios than any other of the gods of Greece or Rome from the beliefs of their converts. Thus were many of the cults of the present day foreshadowed, and no doubt many real cures were obtained.

The Taxi Habit.

Man is the creature of habit, especially when it comes to riding in "Taxis." Life is nowadays so full of hurry and jostle that rapid locomotion alone enables the average townsman to keep pace with its myriad activities. To the busy citizen, whether on pleasure or on business bent, the "taxi" comes as a boon and a blessing, by the help of which he may fulfil an ever-increasing crowd of engagements. What matters it to him that he is thereby hastening on the process of evolution that is developing the brainy side of man at the expense of his body? For every increased facility of mechanical locomotion means a corresponding decrease of muscular exertion. In a word, man is more or less within sight of the time when he will to a great extent abandon the use of his lower limbs, which, later, will atrophy and dwindle into mere relics of the handsome members they now are. This picture is not altogether fanciful, for some of the North American Indian tribes have ridden on horseback for so many generations that they become awkward and defenceless when compelled to go afoot. With all this in mind the man in the street will do well to walk instead of jumping into a taxi. There are other aspects of the case which appertain to the province of the economist rather than to that of a medical journal. The cost of incessant taxi travelling, for instance, drains away money that might be more profitably spent in food, clothes, recreation and other useful directions. Then there is the taxi "tip"—but that we do not propose to discuss at length. It is curious how a respectable and capable set of men like the modern chaffeurs can submit to conditions of employment which render them subject to so humiliating a species of remuneration as that of passengers' gratuities. This question is merged in the greater problem of how far any man is entitled to look for extra pay for discharging his bounden duty. It is the middleman cab-owner who is responsible for shifting part payment of the chauffeur's wages to the shoulders of the taxi-riding public.

The New Beit Fellows.

The results of the fifth election to Beit Fellowships for Medical Research were made known last week. From among 35 candidates the following have been chosen:—Dr. J. O. W. Barratt, Director of the Cancer Research Laboratory, Liverpool University, who at the Lister Institute will study the nature and mode of action of substances contained in or derived from blood plasma; and also cytological studies. Dr. M. Coplans, Demonstrator in Bacteriology and Public Health at Leeds University, who at the Lister Institute will study immunity, with special reference to the action of the silicates upon bacterial and allied substances. Mr. E. C. Grey, at present engaged in research work at the Kaiser Wilhelm Institute in Berlin, who at the Lister Institute will study bacteriological chemistry, with special reference to the relation between bacterial enzymes and chemical configuration. Dr. J. R. Marrack, who is at present engaged in research work at the Cambridge Hospital, and will there study the chemical pathology of arthritic diseases. Dr. V. H. K. Moorhouse, of the Washington University School, St. Louis, who at University College, London, will investigate the metabolism of animals, with special reference to the question of diabetes. Dr. G. E. Nicholls, Professor of Biology at Agra College, India, who at King's College, London, will continue research investigations on the structure and function of the subcommissural organ and Reissner's fibre. Dr. Annie Porter, at present engaged in research work in parasitology at Cambridge University, who will study parasitic entozoa at Cambridge and elsewhere. Dr. J. G. Priestley, of St. Bartholomew's Hospital, who, at Oxford, will investigate the factors concerned in the regulation of the excretion of urine. Dr. Jane Isabel Robertson, the holder of the Carnegie Research Fellowship, engaged in work on the comparative anatomy of the vertebrate heart, who will continue that work at the Victoria Infirmary, Glasgow. Miss Margery Stephenson, who is engaged in research work in London University College, and will there investigate the metabolism of fats. Dr. J. G. Thomson, of the Liverpool School of Tropical Medicine, who at the Lister Institute will investigate the cultivation of protozoa and of tumour tissues. The progress of scientific medicine should be considerably advanced as a result of the researches of these eleven new Fellows.

Novel Pathology.

The medical lore of the average novelist is inextensive but peculiar, and, as a sample of the lay notion of disease, interesting. The literary liabilities to physical disaster are limited. Humanity in novels is heir to few ills, and they are dramatic in incidence and strictly decent in description. This is as it should be. The novelist introduces disease only as a last resort. If wholesale death is to be dealt out, an earthquake, a shipwreck, or other "act of God," suffices. The retail removal of an individual calls for pathological selection. The Victorians liked tuberculosis; the fatal dark-lashed beauty associated with Koch's bacillus appealed to the followers of Byron. The interesting invalid, supported only by the *spes phthisica*, became the heroine of an age assuming decadence. We have left that now. The sharp snap of sudden death is what the writer wants. An eclectic aorta supplies him with potential destruction available at any time. He calls it heart disease. Physicians know that the mitral valve is occasionally diseased. The novelist prefers inquests and the aorta. "Brain fever" is a literary fiction of convenience. It lays the hero low for any suitable time in any suitable degree of moribundity. He invariably recovers amid the acclamations of a tenantry whose loyalty is obviously pre-Lloyd Georgian, often by the operation of "trepanning." "Trepanning" can do anything. The blind see, the deaf hear, the halt are made whole through its beneficent polyvalent manifestations. And pity 'tis 'tis not true. But altruism can go too far. Doctors must live, and in the paper world they are of little use. They may dash down and operate, but for the rest, therapeusis is left in the gentle hands of the entirely successful but pointedly untrained flapper, whose fate we have diagnosed since the first chapter, and which the author commits to paper on the last page but one.

Pathology as Professional Work.

Up to the present we have regarded the practice of clinical pathology as a branch of medical professional work. There are very sound reasons why it should be so, and for preventing this branch of scientific work getting into the hands of persons of whose competence we have no guarantee. No decision in the practice of medicine demands greater responsibility than that as to whether, let us say, a particular piece of tissue is malignant or a particular specimen of blood gives evidence of syphilis. Yet it is a curious fact that in a great many cases medical men show the greatest indifference in obtaining decisions on such points. A practitioner is, as a rule, meticulously careful in his selection of a consultant that he may choose the man who, by experience and learning, is most fitted to help him in his difficulty. The same practitioner, however, is content to accept ready-made diagnoses from any so-called "research laboratory" without taking the slightest trouble to discover whether the person who is to decide some question of the utmost importance to his patient is possessed of either competence or skill. We have heard one physician in large practice boast that he was entirely guided in his choice of a laboratory by the amount of the fee. He sent his specimens to an unknown laboratory three hundred miles away because the fees charged were somewhat lower than those expected by pathologists of repute in his own neighbourhood. Yet no man would have been more careful in his choice of a surgeon to operate on one of his patients. It is to this kind of culpable carelessness that the growth of research laboratories run as side-shows by trading firms is due. Many of these concerns offer to perform difficult and intricate examinations for fees which could not remunerate competent men. The connection of qualified medical men with these advertising firms—if, indeed, they employ medical men at all—calls for the careful consideration of the medical profession. If it is contrary to medical ethics to advertise one's fees for amputating a limb or a breast, it would seen to be equally improper to advertise one's fees for examining sputum or performing the Wassermann test on blood.

PERSONAL.

Mr. Harold Black, M.B., D.P.H., has been appointed Radiographer to the Queen's Hospital, Birmingham.

Dr. E. B. Sherlock, M.D., B.Sc.Lond., D.P.H., has been appointed Medical Superintendent of Darenth Industrial Colony.

Major M. H. Babington, R.A.M.C., has been appointed Clinical Pathologist at the Queen Alexandra Military Hospital, London.

Mr. A. E. Mortimer-Woolf, B.A., M.B., B.C., F.R.C.S., has been appointed demonstrator in the Department of Anatomy at King's College.

Col. J. J. Pratt, I.M.S., F.R.C.S., has been appointed Surgeon to the Seamen's Hospital Society (Dreadnought), with duties at the Albert Dock Hospital.

An interesting lecture was delivered before the Guild of St. Luke last week by Dr. Graham Aspland on behalf of the medical work of the Society for the Propagation of the Gospel in China.

Dr. C. J. Alexander, of the Winsley Sanatorium, was the recipient the other day of a series of testimonials made on behalf of the matron and nursing staff, the servants and the patients, upon the occasion of his vacating the post of Resident Medical Officer at the institution.

Dr. and Mrs. W. W. Jones, of Gelligaer, were the recipients of a handsome testimonial the other day from the Gelligaer District Council as a token of the esteem in which they have been held for the last fifteen years, during which Dr. Jones was the Medical Officer to the Council.

It is announced that a dinner in honour of Dr. Christopher Addison, M.P., will be given on February 3rd, at which Mr. Lloyd George will preside. The acting secretaries are Sir John Collie, 25, Porchester-terrace, W.; and Dr. H. H. Mills, 21, St. Mary Abbot's Terrace, Kensington.

Mr. John Moore Walker, M.B., of Edgbaston, formerly Medical Officer to the Cheltenham Provident Dispensary, left net personalty £45,372. The testator left £13,500 in personal legacies, and the residue of his property to St. Bartholomew's Hospital which will apparently receive over £30,000.

We understand that Sir James Guthrie, President of the Royal Scottish Academy, has accepted the commission to paint the presentation portrait of Sir Robert Philip, M.D., F.R.C.P., of Edinburgh, and intends to commence work before the end of this year. The invitation to join in this presentation has met with a most cordial response, and the necessary amount has been subscribed.

Dr. J. A. Macdonald, M.D., LL.D., of Taunton, the Chairman of the Council of the British Medical Association, who has been chosen by that body to represent them at the Australasian Medical Congress to be held at Auckland, New Zealand, in February next, was entertained recently to dinner by the Executive Committee of the Taunton Conservative Association, of which he is president.

FRENCH CLINICAL LECTURE

ON

THE TREATMENT OF WOUNDS OF THE CHEST.

By D. SOULIGOUX, M.D.,

Surgeon to the Tenon Hospital, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

A CASUAL reader of the debates on the very present question of intervention in wounds of the chest might run away with the idea that surgeons were divided into two camps—the interventionists and the non-interventionists; but, in reality, there is not much difference of opinion. The most ardent interventionist does not advise interference as a matter of course; it comes to this—that in the immense majority of cases disinfection of the wound and the application of a dressing, followed by immobilisation of the patient, is all that is required. Nevertheless, there are cases in which the surgeon must abandon the expectant attitude and perform free thoracotomy and suture of the lung.

It must be admitted that no very precise indications are available, otherwise there would be no difference of opinion. In order to formulate the indications for operation cases of hæmothorax must be subdivided into four groups: (1) Where the hæmorrhage is at once very free and directly threatens life; (2) the effusion is considerable, but the surgeon hesitates; (3) the effusion which has remained at the same level during the first day is rapidly increasing and threatens life; (4) moderate effusion which does not tend to increase but shows no sign of a tendency to be absorbed.

(1) *The Hæmorrhage is such as to threaten life forthwith.*—These cases are not as rare as might be supposed from the infrequency with which they come to us, but as a rule too much time is wasted before they are taken to hospital so they die on the way. Lejars had a case of the kind. The patient was covered with blood, and blood was flowing from the wound in the precordial region; he was pale and pulseless, breathing being scarcely perceptible. M. Lejars operated at once and saved his patient. I do not suppose anyone would oppose intervention in such a case.

(2) *The General State is Grave and the Surgeon Hesitates.*—These are the cases in which it is most difficult to make up one's mind, and in which therefore there is most room for divergence of opinion. Death may be caused (i.) by loss of blood, (ii.) dyspnœa from pressure on the lung and heart. Our predecessors at the time of Ambroise Pare sought to avert these contingencies in two ways. Some dilated the wound instead of closing it, then placed the patient on the wounded side in order to promote the escape of blood from the pleura, and no doubt by this means the compression of the heart and lung is diminished, but the patient runs the risk of dying of loss of blood.

Struck by this fact, the surgeons of the following century made a point of closing the wound. No doubt this made for pleural effusion, but the accumulation of blood, by increasing intrathoracic pressure, was, *per se*, an excellent hæmostatic.

In presence of symptoms of suffocation threatening life, surgeons were led to practise puncture. This is what Nélaton did in a lad, æt. 18, withdrawing a couple of pints of blood, but the attacks of suffocation, relieved for the moment, soon returned and the patient died. M. Quenu related the other day before the Surgical Society how, after a first evacuation of 30 ozs. of blood by puncture and a further withdrawal of 8 ozs. he had, after all, been obliged to widely open the thoracic wall.

At the present time there is no fixed rule of conduct and surgeons are far from agreed as to what constitutes the best treatment of the class of cases under consideration. Some hold that an intervention is *de rigueur* without even waiting for any indications. Others, like Professor Zeidler, go still further. He and Stukey preach that every wound of the thorax of not more than twelve hours standing demands an operation, not of disinfection but of exploration. He argues that in presence of subcutaneous emphysema, which is of common occurrence, it is hardly possible to make out the presence of an effusion of blood less than a pint in amount. Similarly, pneumothorax may be simulated by the diminution of respiration on the fixed side in consequence of pain. No doubt it is not a matter of indifference to provoke pneumothorax, but either it exists and is then rather favourable than otherwise, or it does not exist and it would be dangerous to wait for it in order to explore the wound on the supervention of signs of internal hæmorrhage. His plan is to open up the wound under an anæsthetic in the direction of its course and for its entire length. If the wound has penetrated he uses retractors to separate the edges of the pleural wound and looks whether there is blood in the wound. If not, or only a little, he merely sutures the wound. If there be much, on the contrary, he opens up the wound and looks for the bleeding vessel. The procedure is simple enough; it amounts to an exploratory thoracotomy, but this plan is uniformly rejected in France and even in Germany it has been sharply criticised by Bouchardt, who remarks that among the 25 cases of thoracotomy recorded by Stukey several presented no pulmonary lesions at all.

M. Delorme, who is one of the foremost advocates of intervention and one of the most cautious, has endeavoured to formulate rules for this intervention. He says:—

" (1) When a copious rapidly developed hæmothorax reaches up to, or near, the angle of the scapula, intervention is indicated in order to arrest the bleeding. (2) With hæmothorax to medium amount, with repeated hæmoptysis or free spitting of frothy blood, lasting for upwards of 24 or 36 hours, intervention is again called for. (3) With a medium hæmothorax and serious external hæmorrhage, traversing the dressing, &c.,

intervention is necessary. (4) Serious external hæmorrhage not arrested by occlusion requires the same treatment."

We may possibly concede the last two propositions, but the first two are open to discussion. Numerous are the cases in which the blood has reached the limits assigned by M. Delorme, cases, too, in which the hæmoptysis was free, yet which have recovered on expectant treatment. One man supports a hæmothorax with impunity which would threaten the life of another, and M. Baudet holds that more importance is to be attached to physiological than to purely physical signs. The pulse and breathing, he says, are all-important in this respect. "Increasing dyspnœa which is becoming worse minute by minute, recurring attacks of suffocation, these are signs of the utmost significance." Dyspnœa consequent upon pulmonary distress is manifested by frequent superficial movements of respiration, movements of the alæ nasi and some cyanosis of the face. It only allows of gasping, panting speech, is increased by effort, and is associated with oppression. It is not relieved by repose in presence of grave pulmonary lesions. On the contrary, it is more intense on the second examination, and simultaneously we get a thoracic constriction, pain, and more marked cyanosis of the face. The pulse a few hours after the accident, even with moderate hæmothorax, rarely exceeds 114 per minute, and is still fairly strong. If, in our half-hourly examinations, we find it progressively more rapid and weaker, the wound of the lung is grave. Some surgeons do not yield even to this group of physical and physiological signs and hold that abstention is less dangerous than intervention, but statistics show the gravity of methodical non-intervention. Nélaton's statistics give 44 deaths out of 94 cases, in 5 due to lesions of the intercostal and internal mammary arteries, in 4 to internal hæmorrhage, in 6 to lesions of the big vessels. At Strasburg, in 1870, out of 98 fatal cases, death was due to internal hæmorrhage in 24. Fischer admits 19 deaths out of 34 wounds. Garré gives a mortality of 40 per cent., and even since the introduction of antiseptic methods the mortality is not lower than 30 per cent.

M. de Martel has collected 42 cases of intervention with 28 recoveries and 14 deaths, *i.e.*, 33 per cent. Baudet's personal figures give a mortality of 25 per cent. But all these cases are not comparable. There were only 8 cases of true lung wound and these yielded 7 recoveries and one death under chloroform. As M. Rochard remarked at the Surgical Society, seeing that de Martel's statistics only bore on cases of the utmost gravity, that owing to defective *technique* in 16 cases they had to plug without being able to suture, we may conclude that in wounds of the lung accompanied by serious hæmorrhage, intervention is superior to abstention.

The objections to intervention are: that patients with chest wounds followed by grave hæmothorax recover better under complete immobilisation than after operation (which we have seen is not the case). They urge, moreover, that the operation entails free opening of the thorax, thus running the risk of converting a closed hæmothorax into an open one; that there is the risk of pleural infection; that in addition to post-operative shock the patient is exposed to the risk of infection. To my mind these criticisms are unfounded. The shock is not very great, and the operation was well borne by most of the victims. Penetration goes for little or nothing in respect of secondary infection. In most instances there is already air from the bronchi containing septic germs which, moreover, may have been introduced by the lethal weapon. Then, too, there are plenty of cases on record in which patients operated upon for copious hæmothorax have recovered after ligature or suture of the divided vessels without drainage. This goes to show that septic complications are not solely the consequence of the intervention, since they are common in non-operated patients.

As a matter of fact, what checks the surgeon is the difficulty of knowing whether the hæmothorax, which has attained a certain volume, is not going to stop spontaneously under the pressure of the blood in the pleura. If we wait too long the time for intervention goes by. M. Quénu in such cases recommends puncture with removal of part of the blood. If, then, the hæmothorax tends once again to increase, it is a sign that the hæmorrhage is persisting and we must intervene This is a practical suggestion, but the puncture must not be repeated or we shall bleed our patient to death.

In presence of a serious effusion of blood into the chest the proper course appears to me to be as follows: Examine the patient carefully to make out the extent of the hæmorrhage. I do not attach the importance that some do to moving these patients, for in any case they have been moved a good deal before they reach the hospital. No doubt, in cases where there are no symptoms pointing to the necessity for intervention, it is better to leave them absolutely at rest, but when we have to take a life and death decision I think we must neglect no possible means of diagnosis. Therefore, after complete examination of the patient, after taking into account the amount of the hæmothorax, the state of the pulse and the heart and the breathing, we must stay with the patient, having made everything ready for an operation under the strictest antiseptic conditions. If, an hour or two later, the pulse is not failing and the heart is not further displaced, we can wait, though still keeping him under close observation. If the contrary takes place, if the pulse becomes more rapid and weaker, if the dyspnœa increases and the heart is more and more displaced, then I think it is wise to adopt Quénu's plan and puncture in order to withdraw part of the blood. This gives immediate relief and if this be maintained well and good; otherwise we must intervene forthwith.

(3) *Cases in which the Effusion, after Remaining Stationary for the first 24 hours or for some days, is increasing and threatens life.* These may be divided into two categories. In one series the effusion which had remained moderate in amount during the first day is increasing and threatens life. In such a case, under Dr. Delbet, a young man was admitted with a wound of the left lung. His state did not appear grave, as there was only a little blood-stained expectoration. The wound was closed, and he was kept quiet. The next day there was a tangible amount of effusion, and on the day following this had increased. His general state, however, seemed satisfactory, and there was very little dyspnœa, so that no intervention was thought of, yet the patient died during the night. This case shows how necessary it is to keep these patients under observation, and proves that when

the lung is going on bleeding the patient is in danger and an operation is called for. In these persistent hæmorrhages the displacement of the heart takes place slowly and the consequent dyspnœa is not very marked.

In a second category the effusion, after remaining stationary for several days, begins to increase. This may be due to two causes : (1) The obstruction clot may have become detached, and it is a case of secondary hæmorrhage ; or (2) there is effusion of serum. In the former case thoracotomy must be performed. The effused blood is readily and rapidly absorbed in the absence of infection. The latter may attack the pleura directly or involve it secondarily *via* the lung, which develops traumatic pneumonia. In short, hæmothorax is often complicated by serum exudation, deeply stained red, so much so as to resemble pure blood.

In this event, the temperature may run high as the result either of the traumatic pneumonia or the pleural reaction. The fever, *per se*, does not constitute an indication for operation. There are plenty of cases on record to show that hæmothorax, complicated with fever or not, is capable of undergoing fairly rapid absorption. In my opinion, however, this is not the question. What we want are indications for our guidance in these difficult cases.

In presence of hæmothorax with fever, we need not intervene so long as the dulness and dyspnœa and displacement of the heart do not increase; we need merely keep a close watch over the patient. It is otherwise when these signs show a tendency to increase ; in fact, the indications are the same as in ordinary pleurisy, and we must perform thoracentesis. If the liquid be sterile this will suffice, but if septic or fœtid or distinctly purulent, then we must perform pleurotomy. If, on the contrary, the aspirator withdraws pure blood, I think thoracotomy should be done.

(4) We meet with cases of hæmothorax in which, though the effusion does not increase, it displays no tendency to become absorbed. When this is the case there is probably some inflammatory complication even in the absence of any rise of temperature. The indication is for pleurotomy preceded by costal resection after, of course, having made an exploratory puncture to find out the nature of the liquid in the chest.

So far, I have been discussing the cases of patients who are taken where a perfectly aseptic operation is practicable, but it often happens that these conditions are not obtainable. In this event it is best to abstain from any sort of intervention, merely placing the patient absolutely at rest after cleansing the wound and applying an occlusive dressing. We may administer an injection of adrenaline or horse serum if this can be procured. If, in spite of these measures, the hæmorrhage continues to increase, the only plan is to slightly enlarge the thoracic wound, introducing a Lister's forceps and separating the branches so as to let the air slowly enter the chest. In a case treated in this way by Lelageniere, the pulse returned and the hæmoptysis diminished. The wound was then sealed and the patient made a good recovery.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Sheffield Neave, B.A.Oxon., M.R.C.P.Lond.; Physician to the Queen's Hospital for Children, London. Subject : "Pyrexia."*

ORIGINAL PAPERS.

MIXED INFECTIONS. (*a*)

By I. WALKER HALL, M.D.,
Professor of Pathology, University of Bristol; Pathologist, Bristol Royal Infirmary.

Mixed bacterial infections are responsible for many puzzling groups of symptoms. The difficulties of diagnosis are increased because at one time there is a summation of effects, and at another the secondary results are more or less overshadowed by the predominant organisms. To take the case of tuberculous infections : the exudative pneumonia which occurs is generally the result of a secondary invading pneumococcus ; the exudates in tuberculous pleurisy are almost always pneumococcal at first, the pneumococcus dying out later and leaving the fluid sterile ; the hectic fever is probably due to the action of other organisms.

A mixed infection, however, need not necessarily be purely bacterial. Protozoal lesions may be altered by the entrance of pyogenic cocci, and some of the filtrable viruses act in concert with schizomycetes.

The primary organisms may damage the skin or mucous membranes, and so provide an easy entrance for the secondary organisms, as in tuberculosis, typhoid, dysentery or variola ; or the primary organisms may damage the general body resistance, and so favour the action and spread of secondary organisms. The frequency of pneumococcal infection in typhoid fever and erysipelas illustrates the latter type.

In the spread of the mixed lesions certain fairly definite changes may be expected. The associated organisms may remain localised, as in the case of tuberculous skin lesions infected later with staphylococci. Or both types of organisms may be generalised, as in combined tuberculous and streptococcal infections, typhoid and para-typhoid, etc. Or the primary factor remains localised, and the secondary one becomes generalised. This occurs in the secondary infections of measles, scarlet fever and smallpox, in influenzal conditions with a secondary streptococcal manifestation in the exudates, in the streptococcal lesions occurring during diphtheria, etc. Or the primary agent may become generalised, and the secondary organism remain localised, the most familiar instance of a very long list being the localisation of the staphylococci and streptococci of a tuberculous cavity, while the tubercle bacillus extends into distant parts.

These features are easily demonstrable. Less apparent but equally important is the condition of sub-infection or sub-intoxication in relation to additional infection. The raids of bacteria present in the alimentary and genito-urinary cavities into the systemic spaces are not always unsuccessful. Now and again a few organisms remain undestroyed, manage to live at starvation rates upon the organic secretions, and constitute what has been termed "latent" bacterial action. They may, however, do more than this. Existing comfortably, without much propagation, they may bring about a condition of doubtful sub-infection, that is to say, a stage of invasion of the tissues which is neither a success nor a failure—a stalemate. On the other hand, the metabolic products

---

(*a*) Paper read before the West London Medico-Chirurgical Society.

of the bacteria, or the action of the bacteria upon protein materials, may depress gradually the nuclear activities of the whole body, and thus convert the doubtful local sub-infection into a definite one. In such a case the individual does not present any noteworthy symptoms. He may, however, fall an easy prey to some epidemic disease and receive the treatment for that disease, whereas he is really suffering from a mixed infection, and will not be cured entirely before both exciting agents have been dealt with.

A symbiosis of this kind calls for more than one method of attack. It is not simply a haphazard association of two or more different organisms situated in separate foci and acting individually. There is generally an interaction, and in some cases a combined action. The presence of staphylococci in a tuberculous focus leads to an increased virulence on the part of the tubercle bacillus ; the bacillus typhosus acts more intensely when it is associated with the streptococcus. When the bacillus coli and the streptococcus are present under conditions of a raised acidity the streptococcal influence is depressed, while a lowered acidity, or an alkalinity, allows the streptococcus to gain the upper hand.

It is obvious, therefore, that during the course of mixed infections the bacteria themselves undergo changes which may modify appreciably the ordinary progress towards recovery. Recent investigations have shown that parasites possess very real and efficient powers of adaptability and mutation. There appears to be a continuous adaptation on the part of the micro-organism to the resisting processes of the cell nuclei, as well as to any chemio-therapeutic substances artificially introduced into the tissues. The adaptability and mutative changes naturally become more complex when several interacting agents are concerned.

The diagnosis of mixed infections from the bacteriological standpoint is fraught with many pitfalls. In an apparently pure infection a second micro-organism, or virus, may be present. When two types of bacteria are isolated from pus or other material, it is important to determine their pathogenicity. When more than two organisms are present their relative dependence and altered virulence have to be considered. To this end it is not sufficient simply to demonstrate morphological or cultural characteristics. Their behaviour when placed in the tissue fluids of the host and their defence against the forces of phagocytosis call for investigation. In other words, the resistance of the host requires to be examined. Two cubic centimetres of the serum of the patient should be subjected to ordinary and absorption tests for the content of agglutinins, precipitins and, in some cases, opsonins ; while, in addition, the identification of specific protective ferments by clinical methods and estimations of the combining powers of the anti-bodies by serological procedures may be indicated. Routine blood counts are also helpful.

The treatment of these infections is not always straightforward. There are but few bacteria which lay down their arms at the first sound of battle, or even fall victims to one kind of ammunition. Diphtheria and tetanus bacilli are made less harmful by the use of antitoxins, but they are not thereby rendered incapable of producing more toxin. In the former instance the simultaneous use of a bacterial emulsion or a solution of lipoid material may bring about the more rapid disappearance of the organism ; in the latter, the future may reveal the necessity of supplementing the serum injections by a bacterial emulsion composed of the organisms which furnish the symbiotic conditions necessary for the propagation of the tetanus bacillus, with the view to the removal of the assisting organism, and a consequent inhibition of the growth of the tetanus rods.

In some cases it is best, perhaps, to aim at the removal of one organism alone, and to leave the other one to natural processes. The injection of artificial serum containing lysins, opsonins, antitoxins and antiferments constitutes one of the best of measures. Unfortunately, this can be used only for a short period, and for the tiding of the patient over difficult crises. The dangers associated with family and individual idiosyncrasies materially restrict its use. Recourse must be had to the injection of bacterial emulsions with the view to stimulate the tissues to a better defence. Of late, however, the *sensitised* emulsion, or vaccine, has taken its place as a better means of treatment. A sensitised emulsion combines the properties of the serum and the emulsion. The bacteria are treated with a corresponding artificial serum, and during their contact with the contained antibodies they become altered in such a way that upon subsequent injection they stimulate the body cells to form more suitable protective substances, as well as serve as the means of conveying the antibodies of the serum to the tissues. The sensitised emulsion has further advantages in that it is less irritating locally than the ordinary emulsion, and that much larger doses of the micro-organisms may be given. It has also valuable prophylactic properties, and merits a routine use prior to operations and to childbirth. The sensitisation is generally carried out with horse or other animal sera, but now and then it has proved advantageous to use the patient's own serum or fluid exudates. In gonococcal, influenzal and similar infections such a method is almost imperative.

Another combination which the future may bring into vogue is the association of serum, or bacterial emulsion, with drug therapy. The action of pneumococcal serum is enhanced by the simultaneous use of quinine derivatives, such as ethylhydrocuprein. Serums associated with cerebro-spinal conditions have proved more potent in connection with oleic and boric compounds. Anthrax anti-serum has been augmented by the administration of salvarsan. Tuberculin injections have proved more beneficial when given in connection with solutions of lecithin. Antityphoid measures have recently been supplemented by a combination of metallic solutions. Further experimentation is necessary before these methods obtain general application ; but their mention is perhaps of value in order to emphasise the necessity of treating bacterial lesions by combined and not by unified treatment. The bacterium learns to defy the stock cartridge in a few generations, that is in a few hours, and can laugh accordingly at the ineffectual attacks of the subsequent "pin-pricks."

Whether the treatment is directed against an individual bacterium or against two or more at the same time, the most important factor in the result is the estimation of the extent of adaptation manifested by the infecting agent. Is the originally predominant organism still the chief offender, or has another one taken its place ? Has the one or the other altered its characteristics in such a way as to render the emulsion, serum, sensitised vaccine or drug of little avail? These are questions which call for an answer in every case. At all events, when the treatments appear to fail, the method employed should not be regarded as ineffectual until an attempt has been made to provide the necessary reply.

In mixed infections also the factor of previous immunisation plays a part. Subsequent inoculations may show that the rate and mode of reaction have been altered. The production of protective bodies may be more rapid and abundant, or they may not occur at all. On the other hand, there may be an increased susceptibility. The observation that when an immunity to bacillus coli is induced the injection of dead staphylococci will raise the agglutinating power of the serum for bacillus coli illustrates the problem looked at from the standpoint of mixed action. Reactions like these appear to border upon anaphylactic phenomena. Little as we yet know of their biological significance, their recognition impresses upon us the futility of injecting unknown stock emulsions without due consideration of the factors already determined. Discredit, personal and general, will not be avoided unless the treatment of bacterial infections by anti-bacterial measures is undertaken with a fuller knowledge of the after-effects than is now deemed necessary.

GRAVE ACCIDENTS CAUSED BY THE ELECTRIC CURRENT.

By PAUL ROSTAINE, M.D.,
Ex-Director of Clinical Medicine at the Paris Faculty.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE rapid development of the electrical industry during the last few years has been followed by a considerable increase in the number of grave accidents. Statistics show that their number is increasing by leaps and bounds, in consequence of which the French Government has appointed a commission having for object to revise the standing rules as to rendering assistance to the victims and the precautions to be taken by the rescuers in order to avoid further disaster.

After two years' investigations, this commission has now completed its investigations and has formulated certain recommendations which are of general interest, especially to practitioners who are liable to be called upon to deal with these cases.

Some of you may remember the narrative of such an accident in which the first victim is, unfortunately, not the only one because brave but inexperienced men have rushed to the rescue, risked their lives and lost them in consequence of not knowing how to protect themselves.

Powerful currents are, even now, hardly general enough for their dangers to be familiar to the public. A line through which a comparatively powerful current is passing does not differ in appearance from a simple telephone wire, so that there is nothing to warn us of the danger.

There is one fundamental fact which is not sufficiently known, *viz.*, the importance of perfect insulation from the ground in respect of alternating currents. It is generally assumed that there is no danger unless one touches both wires, but this idea is completely erroneous, even when the lines are perfectly insulated from each other, unless the body itself is completely insulated from the soil. With a continuous current on a properly insulated line, this danger is not present if only one line be touched, because the body would not be subjected to any difference of potential. There is always considerable risk, however, in touching a line carrying an alternating current of high tension, the danger being in proportion to the capacity of the line.

Everything connected with electricity is more or less mysterious for those not familiar with its properties. This mystery is present in the electric accident, at any rate at first sight. A man, says Weiss, accidentally receives a shock from a current possibly not of any very great strength, yet he is left a corpse. The body bears no external trace of injury, and *post-mortem* examination does not reveal anything, the most expert pathologists discovering nothing to explain death.

Then we meet with another instance in which the accident is of a terrible kind. Various parts of the body that have been in contact with the wires are extensively burned, the burns may be deep enough to expose the bones, indeed, limbs may have been amputated, yet the subject survives! I remember such a case, which is certainly not unique, in which the unhappy victim lost both forearms and both legs without his general health being affected.

This disparity of effects is disconcerting, and the Commission set to work to explain them. Haking sought to throw light on the matter by analysis of carefully observed instances of lightening stroke, of accident and electrocution they ultimately devoted their attention to laboratory experiments which alone rendered it possible to carry out a complete and methodical study of the effects of the current.

Prevost and Batelli were the first to demonstrate by their experiments that death in accidents due to electric currents was due to arrest of the heart in fibrillary tremor or to inhibition of the nerve centres with arrest of breathing.

Without going into the details of the experiments carried out on dogs, we may give the principal conclusions. These observers established the comparative importance of tension and intensity and the connection between the points of contact and the physiological effects observed, and they showed the difference of action of the alternating and continuous currents respectively.

The tension of a current is represented practically by its voltage, its intensity by the number of amperes or milliamperes. It is not the tension but solely the *intensity* of the current that determines the dangerous effects.

In one experiment the tension was 42 volts, and the intensity of 42 milliamperes. The current was made to pass for 50 seconds. Directly the current was turned on all the muscles became strongly contracted and powerful expiration was followed by almost imperceptible respiratory movements which in the course of twenty seconds slightly increased. On cutting off the current, the respiratory movements became extremely active, but gradually subsided and soon returned to normal. With regard to the heart, on turning on the current there was a sharp rise of pressure, varying during the passage of the current; but the heart continued to beat regularly though somewhat more rapidly. On cutting off the current there was a sharp fall of pressure, the heart continued to beat, and in the course of a few minutes everything had returned to normal.

In another experiment, with a tension of 4,500 volts and an intensity of 45 milliamperes, the results were the same, but as soon as the intensity was doubled the heart stopped in fibrillary tremor.

In these experiments the electrodes were applied in perfect contact, one on the right fore paw, the other on the left hind paw, so that the heart was in the track of the current. Under these conditions, as soon as the actual intensity of the current rose to from 70 to 80 milliamperes, the heart at once stopped in fibrillary tremor, *i.e.*, in four or five seconds. As the intensity was increased, death took place more and more rapidly, but the current never took less than one or two seconds to act. Above a certain strength, that is to say, over five or six amperes, the heart does not stop, but we get terrible burns at the points of contact.

When the current is below from 70 to 80 milliamperes death may take place all the same but by a different mechanism. Under the influence of the current all the muscles of the body are tetanised, intra-organic combustions are very intense, and hæmatosis being unable to compensate therefor, death occurs from asphyxia in a few minutes. This piece of information is of the greatest importance in view of the steps to be taken to save the victim of such an accident, *i.e.*, one in which the current is below 80 milliamperes.

If the heart does not happen to be in the direct line of the current the effects are very different. In one experiment with the electrodes at the top of the head and under the chin, a current of 1,080 volts tension and 400 milliamperes was passed for 35 and 58 seconds without causing death. The nerve centres are therefore more resistant than the heart. A current which is fatal to the latter is not lethal to the nervous system. The effects are: Arrest of respiration without stoppage of the heart and resumption of respiration as soon as the current ceases to pass.

The remarks made above also apply to the alternating current. From the point of view of electrocution, properly so-called, we get absolutely the same effects whether the current be alternating or continuous, but it takes about four times as strong a current to kill the animal.

The continuous current, however, causes accidents peculiar to itself, even when of comparatively moderate strength and with apparently trifling lesions. The victim of an accident with an alternating current which has severely burned him has nothing further to fear once he has recovered. It is otherwise with the continuous current. A man whose hands have been burned, the current having passed from one hand to the other, recovers soon enough from his wounds, but he complains of marked loss of power in the arms, and this tends to get worse, so does the muscular atrophy. In spite of treatment of any kind he may ultimately lose the use of his arms, and this fact has an important bearing on prognosis in certain working men's accidents.

The grave accidents due to electric currents are not limited to industrial centres; we occasionally meet with them in private practice under special conditions. The ordinary town current is 110 volts for lighting purposes, and this is practically devoid of danger. One can safely handle a switch because the contact is imperfect, but it should be borne in mind that a current of 110 volts becomes dangerous if the contact be too perfect, *i.e.*, with wet hands or over large areas.

Professor Weiss relates three characteristic cases of the kind. A cook took hold of an electric lamp with a wet hand, while, with the other, she tried to draw water from the tap. She fell electrocuted, owing, no doubt, to the wires being leaky. In another instance, a person, in a bath tried to move a 110-volt lamp and was killed. Here again there must have been defective insulation. His third case was that of a workman who was cleaning the inside of a boiler against the side of which he was leaning with his back wet with perspiration. He had occasion to grasp the electric lamp which lighted the boiler, and was electrocuted. M. Zacon, labour inspector, had occasion to enquire into the case of a workman who was working on the Metropolitan Railway in Paris and was replacing a broken lamp by another. The latter broke in his hands and he fell dead, and at the autopsy no lesion or sign of injury could be detected.

Such accidents are rare, it is true, but workmen are always exposed to the risk when working in damp places. For this reason a low tension, in certain damp industries or places, may prove as fatal as a much higher tension in dry surroundings.

The conclusions formulated by the Commission of Enquiry may be summarised as follows:—

The victim should be withdrawn from contact at the earliest possible moment, and this is the more difficult the more moist the surroundings.

With alternating currents of less than 150 volts and continuous currents of less than 600 volts, the rescuers do not run much danger, provided they only make use of one hand, wrapped at any rate in dry linen, and are standing on dry ground, or, still better, on a platform built up of a plank placed on bottles, glasses or earthenware bowls.

With currents superior in strength to the above but less than 6,000 volts, it is still possible to effect a rescue by rigging up an isolated stage to cut off the earth contact and protecting oneself against contact with the victim by layers of cloth.

With currents above 6,000 volts, all attempts at life saving are inseparable from the gravest risks and the least negligence may precipitate a catastrophe.

In domestic installations at a low tension the principal precaution is to avoid touching the conductors. The hands should be protected with dry cloth, and only one hand employed; lastly, always the rescuer should make a point of standing on a dry plank.

The main principles of treatment are to try and revive cardiac contraction by injections of ether and caffeine, artificial respiration and rhythmic traction of the tongue.

CONDUCT IN THE FEEBLE-MINDED CRIMINAL. (a)

By MR. O. F. N. TREADWELL,
Medical Officer, H.M. Prison, Parkhurst.

In this short paper upon conduct in the feeble-minded criminal I have no intention of touching upon all the phases of conduct to be observed in that class of person. I propose to confine my remarks mainly to some forms of disorder of conduct observed in them while under custody in institutions and when subjected to institutional discipline: conduct which is so frequently alluded to as "criminal" or "anti-social" in type, and which makes the management of that class so troublesome.

(a) Read in the Section of Forensic Medicine, International Medical Congress, London, 1913.

It will, I think, be advisable that I should, in the first instance, define what I mean by a criminal, enumerate the classes of cases which in the prisons come under the title of feeble-minded, and briefly describe how they come to be differentiated from the rest of the prison inmates, before considering types of conduct in particular, responsibility, punishment and treatment.

A criminal is taken to mean a person who has committed some offence which has resulted in his coming to prison under a term of imprisonment or penal servitude.

The term "feeble-minded" or "weak-minded" is used in prison parlance to denote all kinds of mental disorder which appear to indicate lessened responsibility. It is sufficiently comprehensive to include several classes, in all of which there is to be observed mental defect, ranging from slight degree of divergence from a standard, called by the observer the normal, to conditions of mental alienation just short of certifiable insanity.

The classes include all those who exhibit congenital defect, or defect apparently arising in early life, defect indicating imperfectly developed stage of insanity, mental impairment after attack of insanity, and defect due to senility or alcohol.

Excluding such cases of the imbecile type as are readily apparent on a cursory examination, it will, I think, be found that the conduct of the prisoner in prison is often the first factor to draw attention to his case. This is shown by his apparent inability to conform to prison discipline, the frequency of his reports for misconduct, or his reaction when under punishment, which, instead of deterring him, provokes him to further acts of insubordination of a more aggravated character.

An examination into his criminal career possibly reveals the fact that he commenced it at an early age, that he has a long list of previous convictions standing against him, or that his crime is one which is found to be commonly associated with feebleness of mind—*e.g.*, stack-firing, sexual offences against children, and other unnatural acts.

Now the evidence of even a very bad record in the direction I have indicated would of itself hardly justify us in placing the prisoner in the feeble-minded class, and it must be within the experience of all those who have to deal with criminals to come across some, from time to time, whose record of crime and of misconduct in prison could hardly be exceeded, but in whom no other evidence of mental defect could be observed, who were nevertheless alert and intelligent and without prominent stigmata of physical degeneration, and who could not be looked upon as other than merely vicious. A careful examination, however, into the intellectual capacity of these badly-conducted prisoners usually reveals some co-existent defects upon the intellectual side, indicative of a low level of intelligence and often accompanied by some of the characteristics of physical degeneration, and it is from the sum of the various factors observed that a classification of feebleness if mind is arrived at.

Now it is obvious that some of these various characters may exist in the ordinary criminal; that it is not the presence or absence of one or two, but the significance to be attached to the presence of several in the same individual which is of importance; consequently, that there must of necessity be considerable divergence of opinion upon the propriety of the classification of some of the difficult border-line cases, and doubts must arise as to whether they are examples of feebleness of mind or simply of vice. These border-line cases often give much trouble in the management of prisons and institutions in which they are incarcerated, in consequence of the disorder of conduct to which they are prone. Their physical conformation is quite up to the average, their conduct is bad, but the evidence of defect of intelligence is meagre, and it is impossible to be sure that we are not dealing simply with depravity. Each case can only be decided upon its merits in accordance with the experience and judgment of the observer.

Coming now to the disorder of conduct exhibited by these feeble-minded criminals in prison, there are some forms which, though not solely confined to the particular class under consideration, are much less frequently met with in the habitual criminal of average intelligence and rarely in the criminal of higher intellectual level. I refer to such grave disorder as filthy conduct, defiling of self and cell, destruction of utensils and clothing, the use of foul and obscene language, etc. In parenthesis, I might add here that these grosser departures have, within my experience of some thirty years, become much less common than they used to be, and this has occurred *pari passu* with the lessened rigour of prison discipline.

Another phase of disorder of conduct often seen in the criminal of feeble mind, but rarely in the habitual of average mind, is obstinacy pushed to an extreme degree; such, for example, as persistent refusal to perform any work over a considerable period of time.

Repeated misconduct is another phase of disorder to be observed amongst these feeble-minded criminals. Reported and punished for some minor offence, the prisoner at once commences an aggravated form of misconduct; reacting in one of two ways, either by protesting vehemently by violence, destruction of clothing, noisy, threatening, foul and abusive language, or by becoming sullen, morose, obstinately silent and negative in demeanour, and refusing to speak or stand up or to do anything he is told. At a varying period after the outbreak he will become amenable, will converse on the subject of his misconduct and listen to argument, perhaps attempt to justify it, or possibly plead that he could not help it, and will probably promise amendment for the future; but his promises are of little value, and it may be confidently predicted that sooner or later a similar train of events will occur.

These reactions are met with in the ordinary habitual criminal, but much less frequently and persistently. In the criminal of the higher intellectual type they occur very seldom, and then the question of early insanity at once presents itself for careful consideration.

What is the degree of responsibility of the feeble-minded criminal for these acts? There can be no doubt, I think, that he knows them to be wrong; in fact, they are often apparently done with the intention of doing wrong; to mark his contempt for those in authority, and to give as much trouble as possible. But when one finds the same prisoner continually behaving in a similar manner, reacting in the same way, and so regardless of the fact that his own self-inflicted discomfort is out of all proportion greater than the annoyance he is causing to others, the question arises whether he is fully responsible; whether his power of controlling his actions is fully up to what should be a normal standard; whether he has an average power of reasoning and judgment at the time, or whether the more elaborate mental processes engaged in reason and judgment are so slow or perverted that he cannot be held to be completely responsible. It is, of course, difficult to justify a plea of partial responsibility; but this concept has become usual in practice, and without doubt has tended to modify the punishment awarded.

That some notice must be taken of these disorders of conduct and some form of punishment, such as loss of diet, confinement to cell or room, or deprivation of privilege, must be administered, will, I feel sure, be admitted by all who have had to deal with this class of criminal. To take no notice of his delinquencies would certainly be put down to weakness by the prisoner himself and lead to continued acts of insubordination; but I think we are justified in our methods of modified prison discipline and modified punishments suitable to each individual case as it arises, judged upon its merits at the time and guided by the results achieved.

There is little doubt, I think, that the conduct of these feeble-minded criminals undergoes much modification in accordance with their environment. Under the ordinary prison discipline it may be bad, and, as I have previously pointed out, it is often the inability to conform to ordinary prison discipline thus shown which brings their mental state under particular observation. When they are removed to the feeble-minded parties under modified regulations and specially selected attendants their conduct greatly improves.

It will be of interest to consider the question of insanity in its connection with these feeble-minded criminals. They account, I think, for a considerable number of the so-called criminal type of insane patients. During the seven years that the Criminal Asylum at Parkhurst was in existence, out of 226 patients who passed through that establishment, 136 had been previously classed as feeble-minded in the prison—*i.e.*, 60 per cent. The point is of interest in its bearing on the conduct of this type in the general asylum. It is considered by those responsible for their management very undesirable to have this type in ordinary asylums, and I can well understand the difficulty they create and the undesirable influence they exert upon other well-behaved inmates.

Their conduct is described as being often due to their criminality and not to their insanity, but I take great exception to the word criminality in this sense. The ordinary well-behaved criminal who becomes insane differs not at all from other insane patients. The point is worth consideration: whether these insane patients from the prisons who exhibit this disorder of conduct are not feeble-minded in addition to being insane; whether the conduct so much complained of is not the manifestation of this underlying feebleness of mind, and the fact of their having been in prison a mere interlude in their history. It has been said that feeble-minded paupers in the asylums do not exhibit these same disorders of conduct. But is this relevant to the subject at all? If their conduct is of disorderly character before they become insane they are sent to prison and thus stamped as criminals, and presenting as they do feeble-minded traits in the particular direction of acts against social laws, prison is the only place to which they can be sent before they become insane.

There is no necessity to labour this point. It has been suggested that this type of insane person should be treated in a criminal asylum and not in a general asylum. I am quite in agreement that careful segregation in separate establishments or blocks is what should be aimed at, upon a classification based upon conduct; and whether in asylums or in prison or in institutions for the feeble-minded, the more complete the segregation of one class from another, the better the conduct of all is likely to be.

The following point has perhaps not been fully appreciated. When a feeble-minded criminal of the badly-conducted class is placed amongst those who are well-conducted, he is, of necessity, kept under special surveillance, the attendants are constantly watching him, certain forms of labour, if he is of the violent type, are not open to him, privileged positions of trust are necessarily denied him, and he is in a continual state of discontent, brooding over a sense of injustice at the favouritism, as he calls it, which is shown to others. Does not this same treatment follow him everywhere, even to the asylum if he should become insane? His segregation in separate establishments, or blocks, where more equal privileges can be afforded, may lead to less discontent and less disorder of conduct.

A NOTE ON A NEW URINARY ANTISEPTIC.

By T. THOMSON RANKIN, M.D.Glas.,
Medical Officer to the Workhouse, Parish of St. Giles's Camberwell.

As the condition of the urine is of great importance in general practice, any new light thrown on the subject—especially from the therapeutic standpoint—should be of general interest. For all practical purposes the urine, in a healthy individual, is the pure and unaltered excretion of the kidneys. Under ordinary circumstances, it is perfectly clear, is acid in reaction, and has a characteristic aromatic odour. It is to alterations in these conditions that one would like to call attention.

Every practitioner comes across cases in which the urine becomes turbid, alkaline, and evil smelling, and in an institution like this such cases are numerous. The symptoms and effects of this condition are distressing to the patient and to those who come in contact with him. The condition is aggravated when the patient is incontinent and everyone is familiar with the results. If the patient is of a sensitive disposition his state of mind can only be imagined and the duty of the attendants is one that is not to be envied. The common causes of such a condition are cystitis, enlarged prostate, malignant disease of the bladder, paralysis, and senility. As bacterial action is directly responsible for the evils referred to, it is natural that one's attention should turn to urinary antiseptics, of which there is an increasing number. There is no doubt that the treatment of such cases presents great difficulties to the busy practitioner, and anything that will be of any help deserves the attention of all.

The urinary antiseptics that are commonly used are, benzoic acid, boric acid, salicylic acid, and hexamethylene-tetramine. The effect of these drugs is well known, and some of them are undoubtedly of value. The great drawback to the efficiency of those that are of any use is the fact that they are liable to produce unpleasant effects, such as gastric and renal irritation, constipation, and impairment of appetite. A drug that would be of value and would not cause any unpleasant effects would be a boon.

During the past seven or eight months the author has been dealing with a number of these distressing cases, and has been impressed with the necessity of doing something to relieve the troublesome symptoms and unpleasant coincident distress. It must be admitted that the treatment of symptoms, such as this appears to be, is not scientific, but one must consider the feelings of the sensitive patient as well as the surroundings of those constantly attending the case.

Before going any further, it may be stated that the treatment of the symptoms has been carried out in a way that will appeal to the busy general practitioner. In fact, the conditions here are not unlike those of general practice. There has been no elaborate bacteriological investigation or no special accessory treatment. The aim has been to relieve the burdens of the patients and attendants. One, of course, recognises the fact that such investigation is necessary in hospital work. The results of the treatment have been most satisfactory, and therefore it is one's duty to record the nature of the treatment. The drug that has been used is cystopurin, a combination of hexamethylene-tetramine and sodium acetate. This drug was used in preference to other urinary antiseptics because others had been used by the writer previously without giving entire satisfaction. They either failed to give adequate relief or caused unpleasant symptoms and had to be given up. A few words on this drug are therefore necessary. It is put up in tablet form, each tablet containing one gramme. There are two parts of sodium acetate to one of hexamethylene-tetramine. It is easy to take and causes no unpleasant symptoms. In proof of the latter statement, the drug has been given in varying quantities and over varying periods. The largest dose has been four tablets four times a day. Some cases had one tablet three times a day, others two three times a day, others three twice a day, and so on. The initial dose in most cases was one tablet three times a day. This dose was gradually increased as required. In no case was any unpleasant effect noted. The period over which the drug was given has varied from one week to four months.

The effects of the drug were (1) it relieved any irritation or pain present. (2) It cleared the urine and made it more transparent. (3) It caused diuresis. (4) It diminished the alkalinity and rendered the urine less unpleasant. It was also noted that the effect was more or less lasting and that when the drug was discontinued the good effects did not disappear at once. If, after a time, the condition returned, another course was beneficial. During the time that the drug was given, the previous habits and diet of the patient were not interfered with, and no extra treatmen was given. The combinaion of urotropin and sodium acetate has been questioned on theoretical grounds, but the practical application has not supported these objections.

It is not necessary to quote all the cases treated, and the following will be sufficient for the purpose :—

Case 1.—W. M. Enlarged prostrate. Incontinence; æt. 64.

This patient had alkaline urine with pyuria. The unpleasant symptoms were present in full force. He was given two tablets of cystopurin twice a day. For four days no effect was observed, but on the fifth day the pus had disappeared although the urine remained alkaline. This state of affairs lasted three days. After that, the urine became neutral, and in a few more days it became acid. This was a result most pleasing to the patient and those attending him. The drug was continued a few days longer and then discontinued. The good effects lasted two or three weeks and then returned the old symptoms. A further course soon established the desired effect again.

Case 2.—E. C. Arterio-sclerosis. Senility; æt. 70. This case was similar to the last and the treatment was the same. In this case, however, the good effects were observed on the third day.

Case 3.—W. L. Enlarged prostate. Thickened arteries. Stricture; æt. 59.

This patient had urinary trouble for many years and gave a history of stricture. The urine was very alkaline and contained a large amount of pus. He had pain on passing urine. At first he had two tablets of cystopurin twice a day. This was continued for ten days. The first five days showed practically no improvement. After that the pain diminished, the amount of urine passed increased, and the reaction varied from faintly alkaline to acid. He was then put on three tablets three times a day for a month. This had the effect of increasing the acidity of the urine but had no effect on the pus. The drug was then stopped for a week and then given three times a day (two tablets) for a month. The result was the same—the reaction remained acid and the pus continued. Three tablets were then given three times a day for three weeks without any change. Then the dose was increased to four tablets three times a day for a week. Still no change was observed. Finally, four tablets were given four times a day. The result was the same: the pus persisted. All this time there was no ill effect and the appetite was not impaired. It was then seen that the patient had a stricture about the middle of the urethra and a chronic urethritis. This was the most unsatisfactory case of all, yet the conditions were much improved and the patient felt better.

Case 4.—W. P. Cystitis. Thickened arteries; æt. 65.

Practically in all respects this case is the same as the last, with the exception that the drug was not given in such large quantities nor for such lengthened periods. The pus continued for weeks although the urine was acid. The discomfort was diminished, the urine increased in amount, and the disagreeable odour disappeared. This patient had nine tablets a day as his largest dose, and after many weeks the pus disappeared from the urine.

These four cases are given as examples. The first two show the drug at its best, while the latter two show the worst cases. Where the results obtained are not satisfactory after a few weeks, it would be advisable to try adjuvant treatment, such as washing out the bladder and the cystoscope and bougies might be called into service to aid the diagnosis.

To sum up, the effects of cystopurin are: That it relieves urinary pain and discomfort, renders the urine less offensive, causes diuresis, clears turbid urine, produces no ill effect, is well tolerated, and seems to have no harmful cumulative action.

DR. EDWIN WM. ALABONE, ex-M.R.C.S., of Lynton House, Highbury Quadrant, N., left estate of which £25,041 is net personalty.

OPERATING THEATRES.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

CASES OF CONGENITAL DISLOCATION OF THE HIP.—MR. EDRED M. CORNER showed the results of cases treated successfully by the so-called bloodless method of Lorenz. The younger the child, he said, at the time of treatment, the better the result. These children were slow to learn to walk, and in consequence their disability and condition were not noticed. Until such notice had been taken, the parents or guardians did not bring the child to the doctor. Thus it was very unusual to have for treatment a child under 1½ years of age. Under two years children of the upper and enlightened classes were sometimes brought to our notice. But in the hospital class of patient, children of all later ages would come up suffering from congenital dislocations of the hip. Perhaps the parents or guardians had not the time or intelligence to notice that something was wrong. Or it may be that they noticed that the patient was different to other children, but they did not think or know what to do to set matters right. This age-factor was very important, as up to the age of five, or even seven, it was possible to reduce by manipulations almost all dislocations of the hip. If the child is above that age manipulations are likely to fail, and we have a choice of either leaving the child alone or operating.

The method of operating Mr. Corner now demonstrated. An incision is made from just below the anterior superior spine of the ilium downwards, across the femur below the trochanter, and upwards on to the buttock, and not so high as the point where the incision begins. The flap thus outlined, consisting of skin, fat and fascia, is turned upward. The anterior edge of the gluteus minimus is defined, as it stretches from the ilium to the top of the great trochanter, an elevator thrust under it and pressed downward on to the neck of the femur. With a thin saw the tip of the trochanter with the muscles attached to it, is separated and drawn upwards. The neck of the femur and the outer surface of the ilium are then exposed. So far the operation is quick, accompanied by little bleeding, and gives the best exposure of the hip of any method. Next the head of the femur is freed and the dislocation reduced.

It will be seen, Mr. Corner said, that the wound is in an awkward situation, and is easily infected in the nursing of the patient. Therefore it is desirable to seal the wound as quickly as possible, and because of the awkward situation of the wound to use in doing it absorbable sutures. Hence it may be noticed that he approximated the margins of the wound with five or six rectangular mattress sutures of catgut, co-opting the cut edges with a continuous suture of ten-day catgut, the stitches being close to the edges and close to one another.

Mr. Corner then gave the history of three cases :—

(1) Double congenital dislocation of hip. Operation. A child, æt. 10, was admitted to the hospital. The left hip-joint was operated upon. The joint was exposed as advocated and the femoral head set free, the acetabulum was enlarged and the dislocation reduced with a fascial flap interposed between the acetabulum and the head of the femur so as to ensure good movement. The division of soft parts led to oozing and the wound was drained temporarily for 24 hours. The limb was fixed in the abducted position with plaster of Paris. A skiagraph taken a few days after operation showed that the head of the femur was not in the acetabulum, but in front and below it. Of course, this may have resulted from a chance movement, but Mr. Corner would rather suggest that the anterior and inferior margins of the acetabulum were insufficiently developed to retain the head of the femur, owing to the congenital dislocation, and to prevent the head of the femur slipping out. This possibility should have been sought at the operation, and if present the hip should not have been put up abducted. In subsequent cases he had sought in the developments of the margins of the acetabulum indica-

tions as to the position in which the leg should be put up afterwards. This has led to a modification of the usually accepted position of flexion, abduction and eversion, and he commonly puts these cases in Stiles' hip splint in only slight abduction (useful for nursing purposes) no flexion and no eversion.

(2) Congenital dislocation of the hip, with failure of the method of manipulation, fracture of neck of femur and operation. A child, æt. 5, was sent to the hospital with a congenital dislocation of the right hip-joint. On two occasions Mr. Corner attempted to reduce the dislocation after the method ascribed to Professor Lorenz, of Vienna, but failed to do so. Mr. T. Twistington Higgins also tried. After the final attempt a skiagraph showed a failure plus a fracture of the neck of the femur. All attempts at reducing the dislocation were now suspended, pending union of the fractured neck of the femur. After this had taken place, the joint was exposed after the method advocated. Mr. Corner said it was now easy to see why we could not reduce the dislocation and why we broke the neck of the femur. The capsule of the "false" hip-joint was very strong and the lip of the acetabulum was very large. In consequence the head of the femur could not be made to ride over this lip, the neck of the femur being finally broken in the attempt. With the exposure of the joint given by the method here advocated it was no difficult matter to place the head of the femur in the acetabulum. All went very well, but unfortunately the child developed diphtheria badly, so that the progress of the hip condition has been quite overshadowed by the more serious results of diphtheria.

He remarked that a point in the treatment of these cases is that sufficient time should be allowed to elapse between the fracture and the operation for the union of the fragments to be firm—let us say not less than three months, and six months if possible. In the case just narrated the union was strong enough, but it might have been stronger.

(3) Tuberculous disease in hip-joint, the subject of congenital dislocation. A little girl, æt. 2, was brought to the hospital. According to her parents, the child had been complaining of pain in her hip and had been limping for some months. As the pain had got worse they brought her to the hospital. The ordinary typical signs of a congenital dislocation of the left hip were present. In addition to this there was some rise of temperature, pain in the joint, especially on movement, and starting pain at night. The presence of the dislocation was confirmed by Dr. Ironside Bruce with a skiagraph. An extension on the leg did not ease the pain. An operation was undertaken and performed as had already been recommended. The head of the bone lay carious in an abscess, so that the arthrectomy became almost an excision of the hip. By means of the incision recommended the operation was well and easily carried out in all its phases, so that in six weeks' time the child was discharged from hospital healed and in plaster of Paris. The hygiene of her home was improved and the progress of the child has been forward from that moment. The good result in her case he attributed very largely to the fact that the method of exposure of the joint allowed the surgeon's work to be very well done. There was no evidence that the disease was syphilitic. A feature illustrated by the case was that both the dislocation and the disease were treated at the same operation. A great argument for not leaving these congenital hips alone is that such dislocated hips are prone to suffer from the incidence of disease.

HAMPSTEAD GENERAL HOSPITAL.

Additional remarks by Mr. Jackson Clarke on the cases of appendicitis reported last week.

Two of the three were cases in which a partial colectomy, removal of the ascending and half the transverse colon, and end-in-side implantation of the proximal end of the divided ileum into the iliac colon was done. The third is a case in which the operation is contemplated. In the first case there was no shock and there was complete relief of the patient from pain. In the second the operation was only done after every measure to render it unnecessary had been taken. The patient was a delicate young woman who has complained of pain for years. A right nephropexy was done together with the removal of an adenoma of the thyroid gland three weeks before the partial colectomy. The latter operation was complicated by the presence of tuberculous glands, which were removed with a part of the mesentery. This operation was followed by a serious degree of shock, but the patient made a good recovery.

Mr. Clarke further remarked that he would like to correct a point in last week's report as follows:—"I said that adhesions after appendicectomy, when present at the time of operation, tended to diminish and, judging by the symptoms, to disappear in time. There are, however, a few exceptional cases in which the converse holds good: the adhesions do not disappear, but rather increase and give rise to an increasing amount of pain. The three cases briefly related last week are examples of the latter class."

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section for the Study of Disease in Children.

Meeting held on Friday, November 28th, 1913.

The President, Dr. Leonard Guthrie, in the Chair.

The following cases and specimens were shown:—

Dr. C. E. Zundel showed a case of "Recrudescent Rickets with Tuberculosis and Infantilism." Former hospital records show that the patient, a boy, now æt. 14, was at the age of 7 years treated as an out-patient and then as an in-patient. At that time he was described as very undersized and with marked rickets. At the age of 11 years he was admitted to the Brompton Hospital with marked ascites, the abdomen being tapped six times in nine months. When he came under observation in June, 1913, his height was 3 ft. 4 ins., and weight 2 st. 11 lbs. Marked deformities of the forearms were present, due to recent fractures. There was some broncho-pneumonia and considerable ascites. Wassermann's reaction was negative.

Dr. F. G. Crookshank and Mr. L. E. C. Norbury showed cases of bilateral congenital dislocation of the hip in twins. The patients were females, aged 8 years 11 months. In each case there was marked displacement of the head of the femur on to the dorsum ilii on either side.

Dr. F. G. Crookshank also showed a case of "Nervous Cretinism." The patient, a female, now æt. 5½, was first seen in 1912, when it was noted that the skin was harsh, the gait tottery, and the knee-jerks increased. Later the gait became more ataxic and the speech became defective. As the result of treatment with thyroid extract the child now walks and talks well, and has lost almost all her symptoms.

Dr. Crookshank also showed a case of "Jaw-Winking." The patient, a girl, æt. 9, has congenital unilateral ptosis. When the muscles of her face are at rest the ptosis is considerable. When she depresses her jaw and "rings" her mouth, not only does the ptosis disappear, but the sclerotic becomes visible on the affected side, above the cornea.

Mr. Philip Turner and Dr. H. Tipping showed a case of a "Mesenteric Cyst" which had simulated an intussusception. The patient, a previously healthy boy, aged 4 months, had a "crying fit," after which blood was passed per anum. After admission to the hospital, a rectal examination showed the presence of recent blood, though no lump could be felt. An anæsthetic was given, and then a movable tumour could be felt close to the umbilicus. When the abdomen was opened the lump was found to be a tense cyst about an inch in diameter, situated in the mesentery in the angle between the ileum and the colon. It bulged into both these portions of the intestine, causing obstruction at the ileo-cæcal valve. The cyst wall was so incorporated with the ileum and the colon that it could not be removed. The cyst was incised, the greater part of the wall clipped away, and the remainder sutured to the parietal peritoneum. The child made an excellent recovery, but a sinus which discharges glairy odourless fluid still persists. Histologically, the lining membrane of the cyst had the same structure as the mucous membrane of small intestine.

Dr. **W. J. Midelton** showed two cases of "Dermatitis Herpetiformis" treated by counter-irritation. The first patient, æt. 7, had scarlet fever when 3 years old, and this was followed by the dermatitis. The disease persisted until February, 1912, when counter-irritation was commenced. The patient was well in three weeks. There have since been occasional slight relapses. In the second case, a boy, æt. 7, the same treatment has been equally satisfactory.

Dr. **G. A. Sutherland** showed a case of "anterior poliomyelitis" with paralysis of the abdominal muscles and collapse of the lung. The patient, a female, aged 15 months, had an indefinite illness thought at one time to be measles, in May, 1913. Three weeks later there was dullness over the right lung, and exploratory puncture was several times performed, with a negative result. When re-admitted in October, 1913, the legs showed signs of former poliomyelitis. The abdominal was prominent, and on crying two marked bulgings were seen, one occupying the upper two-thirds of the right abdominal wall, and the other the lower two-thirds of the left side. Over the right lower lobe posteriorly there were impaired breath sounds. It was suggested that the pulmonary signs were due to massive collapse of the lung, and that this was due to paralysis of the muscles of the abdominal wall.

Dr. **J. W. Carr** showed a case of "enlargement of the Liver with Ascites." The patient, a boy, æt. 2½, was admitted to hospital for ascites in March, 1913, and was tapped on 13 occasions. The liver now extends between two and three inches below the costal margin: it is hard, and the surface feels slightly granular. There had been no hæmatemesis, and only one transient attack of jaundice shortly before his first admission. Dr. Carr considered that the liver was almost certainly cirrhotic, but the cause of the cirrhosis was obscure.

Dr. **F. J. Poynton** showed a case of "Osteogenesis Imperfecta" with great distortion of the bones ot the lower limbs. The patient, æt. 11, has been admitted three times to University College Hospital and many times to great Ormond Street with fractures of the bones of the legs. Her bones have been soft and easily broken from birth, and she has never been able to walk alone.

Dr. **Poynton** also showed a female child, æt. 5, with a slightly enlarged liver and spleen. Examinations showed marked cyanosis of lips, tongue, and throat, and clubbed fingers. No bruits could be heard, but in May, 1913, there was a pulmonary systolic bruit: it was doubtful whether this was congenital or hæmic. Wassermann reaction negative. Also, three children in the same family with alopecia areata.

Mr. **H. A. T. Fairbank** showed a case of ununited fracture of the neck of the femur which he had treated by operation eight years after the injury. When first seen the limb was wasted and held in an everted position. Flexion was limited and abduction practically abolished. Real shortening two inches. A skiagram showed an ununited fracture and coxa vara. The fibrous bond of union was excised, and two screws were driven from the trochanteric surface through into the head. The operation had been successful in abolishing the pain and arresting the progress of the deformity. Mr. Fairbank also showed a case of Osteo-periostitis of the Upper End of the Femur of uncertain origin. There was thickening and tenderness at the upper extremity of the femur, and the child, a girl, æt. 5, limped slightly. The skiagrams suggest an inflammatory lesion, not a new growth. The Wassermann reaction is negative, and mercury and iodides have been given wthout effect.

Dr. **F. Langmead** showed two sisters with deformity of bones and splenomegaly. The first child, aged 6 years 5 months, shows skeletal changes which closely resemble those of rickets. The spleen extends downwards as far as the anterior superior spine of the ilium, and fills the left side of the abdomen. The liver extends down an inch below the costal margin. In the second case (aged 5 years 4 months), the bony changes resemble those in the first, but have developed to a less degree. The spleen is also enlarged, but less so, reaching about an inch below the costal margin. The chief points of interest are: (1) The progressive character both of the skeletal changes and the splenomegaly, and (2) the fact that this is occurring at an age when the usual period for active rickets is over.

Dr. **F. G. Crookshank** also showed skiagrams of a case of Dactylar Deformity from Amniotic Bands.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Meeting held Friday, November 28th, 1913.

Mr. L. G. Gunn in the Chair.

A CASE OF PAGET'S DISEASE OF THE NIPPLE.

Mr. **R. C. B. Maunsell** and Dr. **Joseph T. Wigham** read a paper on the above subject. Paget's original description was quoted, and an accurate clinical and microscopical description of the case was read. The communication was illustrated with coloured drawings and lantern slides.

Mr. **A. Blayney** said the only point open to criticism was that Mr. Maunsell regarded the case as of the nature of rodent ulcer. From this opinion he dissented. All cases observed terminated in cancer of the breast, and this also was contrary to the theory of rodent ulcer. In most cases of rodent ulcer no enlargement of glands was to be found in the neighbourhood. Although he had an open mind on the subject he was inclined to the view that it was a case of malignant growth of the skin which subsequently spread to the breast.

Mr. **Maunsell**, in reply, said that before, at, and subsequent to operation a search was made for glands, but none were found. He held that it was a sort or kind of rodent ulcer. In his and Paget's description induration was not mentioned. The reason for his conclusion was that the appearance or process of cells was more like that seen in rodent ulcer than anything else.

Dr. **Wigham**, replying, said that the case should be expressed rather as a skin cancer than rodent ulcer. He had never seen a rodent ulcer which grew so freely. The cancer deep in the breast was certainly a difficulty, and whether the disease was one cancer or two, or whether the cancer had grown down into the breast, he could form no conclusion from the observation of this single case.

THE TECHNIQUE OF OPERATION FOR CARCINOMA OF THE BREAST.

Mr. **Pearson** read a paper on the above subject and pointed out the principle on which modern radical operation for carcinoma is based, and enumerated certain secondary principles of importance. These were:—(1) To avoid dissemination and wound-implantation of cancer cells during operative procedures; (2) to minimise hæmorrhage and shock; (3) to minimise the risks of infection; (4) to avoid unnecessary mutilation and loss of function. The scope of the radical operation in favourable cases of carcinoma of the breast, in the light of Handley's investigations, was indicated, and the application of the secondary principles to the procedure discussed. The precise *technique* adopted was then explained with the aid of lantern slides, the special points on which emphasis was laid being—(1) that extensive removal of the fascial tissues with their contained lymphatics was the most important safeguard against recurrence; (2) that the operation, even in the making of the cutaneous incisions, should be regarded as a two-stage procedure—an axillary portion which should be first carried out, and secondly an abdomino-thoracic portion; (3) the use of the deep fascia over the clavicular fibres of the pectoralis major (which fibres might safely be retained in favourable cases) as a guide to the separation of the clavicular from the sternal divisions of the muscle; (4) the use of clamps on the pectoral muscles before division both to act as retractors and to prevent possible dissemination; (5) the systematic exposure and securing of the blood-vessels in such a way that the operation was practically a bloodless one; (6) the necessity for additional drainage, besides the ordinary drain in the axilla, in certain cases; (7) the reconstitution of the axillary vault as the greatest safeguard against subsequent loss of function; (8) the importance of early movements of the arm.

The Chairman emphasised the point that success in curing cancer of the breast depended more on early diagnosis than on the *technique* of the operation, and he considered that if the disease had extended at all far the chances of success were not good.

Mr. Pringle said that his experience did not coincide with that of the writer regarding ordinary cases of cancer. He considered no operation radical where one jumped about from one part to the other. A thing which impressed him with regard to this operation was the importance of keeping the upper ends of the incision well out of the axilla on account of the difficulty of properly sterilising the axillary fossa.

Mr. Keegan recalled a case of his which was met in a very late stage, the axilla being involved, and there was a fungating growth in the skin. The patient returned with a recurrence in the skin, which X-rays failed to remedy, and the affected area had to be removed. It was preferable to have a recurrence in the skin rather than to risk the infection of the mediastinal glands, and he advocated the removal of the clavicular portion of the pectoralis major.

Mr. Stokes joined issue as to the removal of the pectoralis muscle. His experience was that there was no use in doing these enormous operations when the case did not come for operation early. He had only one patient alive four years after operation, and this he considered a case of mistaken diagnosis.

Mr. Maunsell said that his experience was that a large number of cases of cancer of the breast lived long lives after operation irrespective of whether they had glands in the axilla or not. He had one patient alive eight years after operation. He considered the breast a favourable situation provided the operation was done thoroughly. He suggested that Mr. Pearson was not radical enough, and that in every case the pectoral muscles should be removed entirely. He would also be in favour of removing more skin than was suggested in the paper. His method was to carry up the skin incision like a V the whole way in order to get away more skin up towards the deltoid region. The hæmorrhage in these operations was very slight. It was always his practice to encourage the patient to move the arm from the first.

Mr. C. A. Ball said that a point which he considered of importance was the putting in of more than one drainage tube. He had been in the habit of draining the axilla and also putting a tube in the lower end of the wound. He drew attention to the involvement in a large proportion of these cases of the supra-clavicular glands, and would like to know if it was recommended that such should be removed. He recalled a case of his in which a patient of advanced years had a large mass in the breast which was removed four years ago, and she had since shown no evidence of cancer. He therefore recommended the local operation in some cases where an extensive one might, perhaps, lead to bad results.

Mr. Pearson, in reply, said he did not mean that the diagnosis of carcinoma of the breast was easy, but that carcinoma of the breast offered more facility for diagnosis in a curable stage than carcinoma in any other region. The ordinary case should be one which was favourable to removal and should have no involvement of the axillary glands when it came to the surgeon. He would regard glands in the axilla as unfavourable, and in such cases would recommend the removal of these glands. He suggested that if there was any involvement of the supra-clavicular glands, radical operation was contra-indicated. In the favourable cases he thought the clavicular portion of the pectoralis muscle might be left. He suggested that the public should be better educated on this subject with a view to bringing about the earlier treatment of carcinoma of the breast. He did not agree with the method of carrying the skin in a V on the axilla in early cases.

HARVEIAN SOCIETY OF LONDON.

Meeting held December 11th, 1913.

The President, Dr. Leonard Guthrie, in the Chair.

Sir Ronald Ross, K.C.B., F.R.S., read a paper on the

STUDY OF INFECTIONS BY ENUMERATIVE METHODS.

The author drew attention to the advantages of modern investigation by groups of men working together under one head; indeed, he hinted that the time had now arrived when advance of tropical medicine could only be made by organised team effort. Sir Ronald dealt chiefly with the work produced and the investigations carried out by a small team working under his direction in Liverpool, which had worked together for two years on a sum of £900 granted to him from the Home Office. There was a vast amount of work to be done and several very useful advances and observations made; the team unfortunately scattered and the work was abandoned when the money came to an end. The observations dealt chiefly with the intimate characters and phases of sleeping sickness, a new variety of which was actually discovered by these workers, and also the result of drugs on this disease both in man and animals.

Reference was also made to the real nature of blackwater fever and its experimental production on animals. The paper, though highly scientific, proved extremely interesting to all, and was clearly illustrated by lantern slides, and microphotographs, many of which were reproduced in natural colours.

Dr. Sydney Phillips thanked Sir Ronald Ross in the name of the Society for the interesting lecture.

The Annual General Meeting of the Harveian Society will be held on Thursday, January 8th, 1914, at the Stafford Rooms, Titchbourne Street, Edgeware Road, W., when the election of officers for the ensuing year will be proceeded with. Reports will be received from the treasurer and hon. secretaries. Dr. Leonard Guthrie will deliver his presidential address on "The Early Transactions of the Harveian Society." The New President will be invested and the proceedings will be terminated by a smoking concert, the arrangement of which will be placed in the hands of Mr. John Ivimey.

SPECIAL REPORTS.

THE NATIONAL MEDICAL GUILD.

[Specially Reported for this Journal.]

A meeting of medical practitioners in furtherance of the objects of this Guild was held in the Town Hall, Hammersmith, on Friday, December 19th, Dr. C. J. Buttar in the chair.

The Chairman explained that the Guild was registered under the Trades Union Acts, and its Council had recently been impressed by two facts. Firstly, trouble was looming ahead for the profession in a short time; and by 1915, if not before, the whole subject of medical benefits under the Insurance Act would be again under review. And there was great probability that in process of time the dependents of insured persons would be dragged into the Act, meaning that 37 million persons would come under its provisions. The second great fact was, that despite the urgency of the question, there was but little cohesion in the profession, or preparedness for the coming struggle. He reminded the meeting of the collapse of the British

Medical Association fighting fund, and that scheme was hung up for at least seven months, during which there might be happenings of serious import. An address would be given by Mr. E. B. Turner, who had long been a convinced trade unionist, and afterwards he would invite questions and comments.

Mr. E. B. Turner, in the course of his well-delivered speech, said some of his hearers might not think a learned profession was the proper sort of body to form a trade union, but careful consideration had convinced him that under the changed conditions in which the profession found itself trade unionism was a practical necessity. Some people had been so foolish as to say—and others even more foolish to write—that the fight for the dignity and emoluments of the profession was now over, and all that remained was to sit down and make the best—or worst—of it. It was an unfortunate thing to say at the present time, because the whole of the relations of the medical profession to those patients who belonged to the industrial classes would before long be cast into the melting-pot, whichever political party might happen to be in power. Consideration was even now being given to the question of the provision of medical attendance to uninsured persons and to the dependents of those who were at present insured. The profession ought, therefore, to take warning from the past and be prepared for the future. In 1915 the extra two shillings and sixpence offered by the Chancellor would come to an end, and in that year there would probably be new legislation and amending Acts. A further important factor was the solvency or otherwise of approved societies. Those societies were finding, under the operations of the Act, what they considered an abnormal, but what was really only a normal, rate of illness, considering what bad lives many of the members were; and sick-pay was greatly crippling their resources. And even the larger societies were exercising the strictest supervision over their expenditure in order to keep within the bounds of actuarial safety. If some of them were likely to come to grief there would arise the allegation that the doctors were being paid too much and were doing too little for it, and consequently there would be an effort to reduce the remuneration. Such relationship came home to every doctor whose practice touched the industrial classes. There must be an adequate fund for the propaganda. One of the chief reasons the profession came to grief before was that the money behind them was not sufficient. There was then a fund, guaranteed by members of the profession, and vested in trustees appointed by the British Medical Association. It never totalled more than £137,000. Even if members had stood out and it had come to a fight, he doubted whether the fund could have been used effectually. And in the case of an action at law, which turned against the British Medical Association, possibly the reserve and the property of that Association could have been drawn upon for the purpose. Wherefore it was plain that if there was to be a fighting fund it must be safe, and the only way to ensure that was to fight by means of the fund of a trade union. In this country only two institutions were above the law—one was the King individually, and the other the trade unions, collectively and individually. The last few weeks furnished instances of the straining of the law to help trade unionists. The ideal would be for the British Medical Association, with its 24,000 members, to become a trade union; it could then carry out the scientific work of the profession on one side, and the fighting, the trade union work, on the other. But when that project was discussed, it was found that the legal difficulties were such as to be practically insuperable. But he did not want a trade union which would be pulling against the British Medical Association, but which would work in harmony with it and along parallel lines. Even the present potential fund of the Guild would probably be safer than the British Medical Association funds for fighting purposes. Whether it was possible to proceed against the individuals in trade unions was a matter under discussion, but it was clear that the funds of such union as such could not be drawn upon for the purpose. Further, if the profession wanted to get anything done in Parliament, it must, and ought, to have a voice in Parliament which should speak for the profession, and be independent of party. Those of the medical profession now in the House subordinated the interests of their profession to those of party, and he did not blame them for that, for they were sent there as party men. A representative of the profession could possibly be sent to the House from Marylebone. He hoped it would be clearly seen that this matter appealed not to any one section of the profession, but to the whole of it, and especially those whose work lay among the industrial classes. Such a trade union was the more needed as certain sections of politicians considered that the best way of looking after the health of the community would be an absolutely State service, including everybody, from the humblest practitioner to the senior consultant. He looked upon such a thing as most injurious, both to the profession and to the health of the public. However, the profession, properly organised, could put an effective stop on that. He hoped the profession would have a very strong and effectual trade union, embracing the medical men of the whole kingdom, and work on parallel lines and in harmony with the British Medical Association.

Dr. Boclet said the apathy of the profession on matters concerning its own defence was appalling; and it had resulted in the doctors being humiliated in the eyes of the public. He appealed for a united front, so that the profession could stand or fall together.

Dr. Tompkins said the British Medical Association had been blamed for its failure, and certainly one or two members of the Council deserted them in the time of need. But it must be remembered that the Association consisted of the unit members of the profession, who did not even, as a body, try to get together a decent fighting fund by giving two or three pounds each. The reason the trade-unions of the country had achieved such ascendancy was that the units had a personal interest in the struggles of their particular trade: the men did not do much speaking on platforms, but they met on leaving work and discussed questions. The British Medical Association was the largest body and the oldest, and it was the fault of members of the profession if it had not stood them in good stead in the past. He still thought it was to that Association the practitioner should turn, and he was glad to hear Mr. Turner say he hoped the Guild would work in harmony with the older and larger body. It would be well if the British Medical Association could hold the strings of the other societies, instead of the opposition implied in the multiplication of independent bodies.

Dr. Raiment (General Secretary) said a resolution would be submitted asking the British Medical Association to recognise the Guild as an auxiliary body, showing that the feeling and policy of the executive was not antagonistic to the older body. The Guild was registered in July of this year, and if for any purpose they wished to plead Section 4 of the Trades Disputes Act, it was not a matter of argument whether the Guild was a trade-union. Trade-unions possessed certain definite legal immunities and privileges. The funds of the Union, by the Trades Disputes Act of 1906, were protected from actions for libel, slander, actions in restraint of trade, acts of conspiracy, or tortious acts, the latter having been defined as anything from pocket-picking to manslaughter. The union was above the law in those respects. The British Medical Association could not act in restraint of trade, as shown by the recent action, The Marquis of Zetland *v.* The British Medical Association. If the Marquis of Zetland should succeed, it would not be possible for the *British Medical Journal* any longer to continue the useful work it had been carrying on for many years in issuing warning notices in the case of barred appointments. The action had certainly come at a most opportune moment to cause the profession to realise the truth of what the Guild had been preaching during the past few months. Great progress had been made at Salford, where some 95 per cent. of the practitioners had joined the Guild, and the branches at Sheffield, Leeds, Manchester, Oldham, Rochdale, Plymouth, S. Wales, Forest of Dean and along the South Coast were rapidly increasing in membership. In the British Medical Association the Guarantee Fund was raised by voluntary effort, and the same men were found to be giving each time. The Guild's method was to raise levies which, unless he could show good cause to the contrary, must be paid by each member or that member must resign; and the amount of such levies, in any year, had been limited to £20; but it was not expected that any such sum would be asked.

Dr. BURNHILL advocated the objects of the Guild, and thought the British Medical Association could be a purely academic body, the Guild looking after the material side.

Dr. TOWNSEND proposed "That this meeting of practitioners, having heard Mr. E. B. Turner, and being convinced of the necessity of a trades-union for the profession, pledges itself to support the National Medical Guild, and to use every legitimate means to compel the British Medical Association to recognise the Guild as an auxiliary body."

Dr. RAIMENT seconded, and it was carried, three voting against.

Mr. Turner was cordially thanked for his address, and in his acknowledgment he recommended British medical men to emulate their German confreres at the present moment in their efforts to secure what they felt they were entitled to.

ROYAL COMMISSION ON VENEREAL DISEASES.

At the eighth meeting of the Royal Commitssion on Venereal Disease, evidence was given by Sir William Thompson, Registrar-General for Ireland. He said that as a cause of death venereal diseases played a relatively small part in Ireland. The death-rate from syphilis and allied diseases was 0.78 per 10,000 of the population, whereas the figures for tuberculosis at the head of the list were 21.52 per 10,000.

Compared with previous years, the deaths from syphilis and general paralysis of the insane appear to show a tendency to increase, but Sir William Thompson thought that much of the increase was more apparent than real, and was due to the more careful recording of deaths. The greater part of the deaths from venereal diseases occurred in the two cities Dublin and Belfast. In Dublin the figures were abnormally high, the death-rates from syphilis and general paralysis of the insane being about twice those of London. On the whole, the incidence of venereal disases in Ireland was very must lower than in the rest of the United Kingdom; the syphilis death-rate was only that of England and Wales, while with regard to infant mortality the number of deaths due to syphilis per 1,000 births in the three Kingdoms were: England and Wales, 1.29; Scotland, 1.4; Ireland, 0.59.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 20th, 1913.

PULMONARY EMPHYSEMA.

PULMONARY EMPHYSEMA, says Dr. Rosenthal in the *Monde Médical,* may be considered as observed in the adult and in children.

In the adult it is a chronic affection leading to grave complications as it progresses.

Treatment endeavours to arrest its progress, but cannot pretend to restitution *ad integrum.*

In children emphysema is observed in the course of pulmonary affections as capillary bronchitis, whooping cough. Here a complete cure may be obtained by intelligent treatment, for the anatomical lesions are much less pronounced. It is simply a question of distension of the alveoli without breaking down of the walls.

The causes of emphysema are numerous: Heredity, neuro-arthritism, acute pulmonary affections, and, more especially, bronchitis, dyspnœa, violent efforts, cough, etc. One of the chief causes of emphysema is asthma; all asthmatic persons became emphysematous.

The palliative treatment of emphysema consists in iodides and arsenic:—

Iodide of Potassium,	3 gr.
Arseniate of Soda,	1 gr.
Water,	10 oz.

One or two tablespoonfuls a day, half-an-hour before meals. Dujardin frequently prescribed tincture of Lobelia, and Saint-Phillippe gives the preference in the child to iodide of arsenic:

Iodide of arsenic,	6 grs.
Water,	10 oz.

five to fifteen drops at meals.

Where there is reason to believe in the existence of tracheo-bronchial adenopathy, M. Hirty prescribes:

Metallic iodine,	2 gr.
Iodide of potassium,	½ dr.
Arseniate of soda,	1-5 gr.
Syrup of bitter orange,	6 oz.

a tablespoonful each morning.

However, these drugs cannot be prescribed indiscriminately; account must be taken of the ætiology. In arterio-sclerosis iodides will be freely prescribed; in stout persons arsenic will be avoided.

If pharmaceutical treatment has a certain recognised utility, it is much inferior to the practice of physiotherapy, which is really curative, especially in children.

A person suffering from emphysema, says Rosenthal, presents both lesions of the pulmonary parenchyma and respiratory troubles. Distension of the pulmonary alveoli with thinning of the walls and rupture of the elastic fibres characterise the lesion. Inspiration is brusque, expiration slow, difficult and incomplete. The thoracic cage is rigid, and at each inspiration the diaphragm lowers a little.

Against these troubles kinesitherapy has aim: To educate the rhythm of the respiration, to suppress the insufficiency of the diaphragm, to correct the rigidity of the thorax, to educate the expiration, etc. Such effects are obtained by different mechanical apparatus. Aerotherapy has also been employed with success.

Questions of hygiene, alimentation, climatology and mineral waters have a great importance in the prophylaxis and treatment of emphysema.

Patients suffering from emphysema are always very susceptible to atmospheric variations; they take cold for nothing. They should be inured to external reactions by cold lotions of the body or dry frictions with spirits of lavender. They should not take any alcoholic liquors, and should be very moderate in the use of carnine foods. Whenever possible they should spend the winter in a warm climate.

Cold in the head, laryngitis and bronchitis should be immediately treated.

As to the mineral stations, Mont Dore is the most frequently indicated; however, if bronchitis with suppuration is present Saint-Honoré, Eaux-Bonnes, Cauterets should be preferred. Where cardiac troubles exist, the carbo-gaseous baths of Royat are very useful.

As to complications that may be observed in emphysema, dyspnœa may present special characters: It comes on by attacks and appears to be independent of all bronchitis or congestion. It is best met with inhalations of nitrite of amyl, fumigations of nitre paper, acetic ether, thirty drops in a four-ounce mixture, taken by dessertspoonful every hour, inhalations of oxygen gas, or, better still, subcutaneous injections of this gas according to the method of Ramond.

Opium or morphine should be used sparingly.

Bromide of potassium,	3 dr.
Cherry laurel water,	3 dr.
Syrup of ether,	1 oz.
Water,	5 oz.

Two or three tablespoonfuls a day.

The heart will be sustained by sparteine, camphorated oil, caffein, digitalis, in small doses.

GERMANY.

Berlin, Dec. 20th, 1913.

At the Verein für Innere Medizin and Kinderheilkunde Hr. Magnus Levy communicated a note on the

SUBCUTANEOUS INFUSION OF SOLUTION OF BICARBONATE OF SODA.

He said that solution of sod. bicarb. in cases of diabetic coma could be given by the mouth, the bowel, subcutaneously, or into a vein. Usually the administration was either by subcutaneous infusion or transfusion into a vein. Unfortunately, however, when 4 per cent. solutions were made use of necroses had not unfrequently been seen to follow. If these were to be avoided, the solution should not be stronger than 3 per cent., and of this about a litre might be given at one time. He had had good results with his cases treated in this way. Sod. bic. was decomposed by allowing the solution to boil, but it could be produced again in the system by injecting carbonic acid.

Hr, Rosenthal said that amongst the cholera patients in Bulgaria saline injections were made in cholera coma, which was not unlike the coma of diabetes, and with good results. Out of 24 cases treated in this way 12 recovered.

Hr, Umber believed that the effect was more stimulating on the heart when the injections were made into a vein.

Hr. His suggested that the soda solutions should be kept in large ampullæ under pressure of carbonic acid with the necks hermetically sealed or rather melted together. This would prevent the decomposition of the sodium bicarbonate.

Hr. Kausch had seen good effects in surgical practice from intravenous injections of solutions of soda alone.

Hr. Hirschfeld considered Hr. Levy's proposal to be a distinct step in advance. In giving intravenous injections an excess of vascular pressure was set up that had injurious consequences.

Hr. Klemperer, on the other hand, did not think that the alkali treatment of diabetic coma had shown any material practical advantage. He himself had seen only transient improvements. In such cases he gave coffee and camphor also and infusions of grape sugar.

Hr. Ehrmann pointed out that intravenous infusions raised the blood pressure whilst subcutaneous ones did not.

At the Gesellschaft für Chirgurie Hr. Harzbecker showed a

MULTI-SUFFERER.

The patient was a shoemaker æt. 44. In the year 1887 he fell from a horse, and after the accident and in supposed association with it, he suffered repeatedly from attacks that resembled ileus. During a period of 18 years laparotomy was performed on him no less than 24 times, the first operation being in 1895 and performed by Geheimrat Rötter. He was again under Hr. Rötter's care in 1903, when colostomy was performed. Later on an artificial anus was made, and last of all an anastomosis between the cæcum and the sigmoid flexure. After that he underwent only conservative treatment, light baths, infusions into the sigmoid, physostygmine, and morphia. It was said that the light baths had done the most good.

The patient showed all the typical features of chronic interospasm. The mischief was undoubtedly in the peristalsis, and was entirely due to nervous causes. Whether the accident had any causal influence could not be said with certainty. The patient in the mean time was a psychopath, an alcoholic, and also a morphinist. It was to be hoped that the demonstration of the patient with its publicity would prevent any further useless laparotomies.

Hr. Sonnenberg observed that the patient had been in the Moabit Hospital five times. There he had been treated with moderate doses of morphia and with success.

Hr. Max Cohn showed a diapositive of the patient in which, however, nothing could be recognised showing a connection with any of the numerous operations that had been performed. Neither was anything visible by which the very bad adhesions met with could be recognised.

At the last meeting of the Medizinische Gesellschaft when the time came for the discussion on Professor Bumm's report on his experiences in the treatment of malignant diseases by thorium X, radium and the X-rays, the president announced that before the reading of the paper he had given instructions that the doors of the hall should be guarded and requested members of the society to divulge as little as possible of the proceedings to the lay press. Sufficient publicity and that of the proper kind would be afforded by the presence of the accredited reporters of the professional journals. It will probably have been noticed how very freely medical matters, especially as regards new methods of treatment, have been discussed in the lay press. It has been felt that this has been overdone and that the custom is eminently calculated to lead to abuses—of more than one kind. Hence the precautions mentioned.

UNITED STATES OF AMERICA.

New York, Dec. 1st, 1913.

CLINICAL CONGRESS OF SURGEONS.

(*Continued from issue of December 10th.*)

The feature of the meeting was the great attention paid to the

Campaign against Cancer.

As stated in The Medical Press and Circular, in the account given of the meeting of the Clinical Congress in New York in November, 1912, and again of the meeting of the Canadian Medical Association in June of this year, a campaign under the auspices of the American medical profession is being waged vigorously against cancer. Its results up to the present and the prospects of a successful issue were made prominent matters for discussion at the Chicago meeting.

On Wednesday, November 12th, Professor Krönig, of Freiburg, Germany, dealt with the radiotherapeutic treatment of

Benign and Malignant Tumours.

He concluded that so far as the investigations of himself and colleagues up to date were concerned, they had not succeeded by means of the *technique* employed in curing a single case of metastatic carcinoma. It was quite possible to produce remarkable retrogressions and checking of the carcinomatous metastases by means of intense radiation of Roentgen-rays and radium, but in all cases up to the present the carcinoma had later on spread further. They could not say they had saved a single patient. In the second group the majority of cases were at the present time impossible of cure, in spite of any known Roentgen-ray and mesothorium activity.

Dr. Howard A. Kelly, of Baltimore, said that he had used radium in 366 cases, of which 188 were malignant growths. He had treated forty cases of cancer of the lower part of the uterus, where the disease was apt to spread rapidly, and the cases were considered hopelessly advanced and inoperable, and in three of them, after extensive operation, radium was used. If the usual methods had been followed a speedy recurrence would have taken place without question. In these three instances there had been no recurrence and health had been fully restored. Dr. Kelly told of a few other cases of malignant disease in which the employment of radium had been followed with most satisfactory results. He stated as his opinion that if a more abundant supply of radium were available its use for superficial cancer would yield better results than surgery. It would cure cases of cancer of the nose, lip, etc., where surgery would only mutilate.

On Thursday, November 13th, the report of the Cancer Campaign Committee was read. Dr. Thomas L. Cullen, of the Johns Hopkins University Medical School, Baltimore, one of the prime movers in the Campaign, said in part when people once understood the nature of cancer they would gladly avail themselves of surgical aid. In the past decades attempts to instruct the physicians alone had not produced any decisive results. Hence they had to go to the people at large through the newspapers and magazines. Many popular articles had already appeared. The Press had responded nobly to their appeal. As a result patients were coming earlier. Still, there was need for further dissemination of knowledge by means of lectures on hygiene in women's clubs, factories and elsewhere. Better records had to be kept, hospital statistics had to be carefully analysed so that accurate deductions could be drawn from them; they must have surgical pathologists to aid in diagnosis. Thorough operations must be insisted upon as soon as the diagnosis of cancer had been made. All modern methods of recording data must be utilised in hospitals. Patients who had been operated upon must be followed up and the results recorded.

Cancer of the Uterus

was one of the most frequent forms of cancer in women. The first symptom of cancer of the uterus was bleeding, and as the disease progressed and parts of the cancer broke down, the discharge became offensive. Cancer of the neck of the uterus was the most common form and could be readily detected by the use of simple instruments. Cancer of the body of the uterus could not be seen and could only be definitely determined by scraping away some of the material and examining this with the microscope. The material removed was suitably hardened and shavings about 1-500th of an inch thick were made. and these were stained and examined with the microscope. The pattern of cancer was totally different from that found in health, and the expert with the microscope could usually tell with absolute certainty whether the disease was cancer or not. In past years few cases of cancer of the womb had been cured. Now from 20 to 25 per cent. of those suffering from cancer of the neck of the uterus who were operated on, were permanently relieved. The results following operations for cancer of the body of the uterus were still more comforting, at least two-thirds being permanently cured. Cancer of the uterus was most common between the 30th and 50th years, but had occurred in early womanhood and might also attack the aged. Any woman with bleeding that could not be definitely explained ought to be examined at once, and any patient having much bleeding at the time when "change of life" occurred ought to seek medical aid forthwith. The bleeding might be due to cancer or might be caused by some simple ailment. When women realised what splendid permanent results might be obtained by early operation and fully appreciated the necessity of finding out exactly what was the matter with them, instead of procrastinating until the disease was far advanced, then the percentage of permanent cures would be greatly increased. Mr. Samuel Hopkins Adams, of New York, the lay writer who has been chiefly instrumental in forwarding the Campaign amongst the community at large, said that much could be done in health education of the public, whether in cancer, tuberculosis or the venereal plagues, or in epidemic diseases, by lectures, but more could be accomplished by the magazines. The universal agency, however, of popular education was the daily press. Between that agency of enlightenment and the medical profession there had been raised a barrier fraught with difficulty, the barrier of the unwritten law of the profession, which said to the doctor: "Thou shalt not appear in print." The daily paper, with all its sins, was the one agency by which the medical profession could impart immediate, positive, and direct universal education, a saturated solution of enlightenment. Nothing else would do it. There was no sacred reticence required of a doctor other than the reticence that guards the privacy of his patient. The time had come when the obsolete ban of silence should be lifted and the propaganda should go on through the agency best fitted to spread it, the daily newspapers.

Dr. Edward Reynolds, of Boston, discussing the question of publicity and education by means of the American Society for the Control of Cancer, said in part, after referring to the essential importance of diagnosing cancer in its early stage, that individually the members of the society did their best to publish to the world the fact, but collectively and as a profession nothing had yet been done. Little influence could be exerted upon the over-conservative, the timid, and the other weak and halting members of the profession; but our patients, the great lay public, had a right to demand that every member of the profession should be forced to do his duty in this direction. As yet the profession had not had the organisation, the money, nor the trained workers which were essential to success. The profession was more than ready to give its time and its trained ability to the work, but the profession formed neither a large nor, as a whole, an affluent percentage of the community. The money for any such widespread organisation must come from the numerous and more wealthy laity, for whose benefit this movement was being inaugurated. The American Society for the Control of Cancer was a body which was composed of prominent members of the profession and of influential members of the laiety. It was actively at work in perfecting a widespread organisation of national scope for the prosecution of the campaign. It planned to work in co-operation with all the existing organisations in the study of cancer and in promotion of the necessary publicity of all the points on which we already had assured knowledge. It asked the sympathy and effective aid of every member of the profession, and of every interested layman and laywoman.

(*To be concluded.*)

NOTES FROM THE AUSTRIAN TYROL,

In the course of travel one hears a good deal of Innsbruck, the principal city of the Tyrol, and those who have had the good fortune to visit these parts pronounce it without hesitation to be one of the most enchanting resorts whereto those contemplating a Continental tour can turn their steps.

Fortunately, it is not yet overrun by holiday crowds of noisy tourists as are the Swiss resorts in winter. Here all is calm and brilliant as the sun, which appears to shine in the utter absence of fog throughout the day. When I first made acquaintance with Innsbruck in somewhat shattered health some ten years since, I was amazed at the beauty of its surroundings and the picturesqueness of the town: amazed also that it was so little known to English travellers. Times have now changed here as elsewhere. The majority of visitors appear to be of English or American nationality, with a large consignment of those whose military or civil duties have chanced in India or other sub-tropical countries and who have come here to recruit their health. The Hotel Tirol likewise, at which I then stayed and am now staying, has increased its accommodation of necessity and is now a magnificent building, under the same genial control of Mr. Carl Landsee. It is not possible that the beauties of this extensive country can be realised in a sojourn of two or three days. Weeks, if not months, can be happily spent here. The excursions are numerous and unique, and with the present-day craze for motoring, long distances can be negotiated through the most glorious Alpine scenery to be found anywhere in Europe. But fortunately these parts are not as yet overrun by the hooting motor, and sleighing can be indulged in with impunity. As a health resort Innsbruck can fully hold it own. The air is tonic, dry, invigorating; free from sudden changes of temperature. No cold winds are felt here, as it is situated 2,000 feet above sea level in the centre of a basin whose sides are snow-covered mountains rising from 7,000 to 8,000 feet, which protect it from the north and east, whilst the mountain sides act as a colossal reflector of the sun, which sheds its radiant warmth through the motionless air of the valley during the day, whilst the nights are invariably cold and dry.

Innsbruck, too, is not an out-of-the-way region. Few cities have more advantages; it boasts of a University, with other excellent educational establishments, first-class train service, with through trains from

Paris and Brussels to Vienna, and from Berlin and Munich to Rome, thereby giving unusual facilities for travel. To this glorious Tyrol, picturesque to a degree, with health and pleasure resorts adapted to the majority of humanity, we journey over the beautiful Brenner Pass, enveloped at noontide in a mantle of white velvety snow, and at the sunrise and sunset hours as in a garment of many colours; for with the rising and setting of the Tyrolean sun the hills present a panoramic view of unique tints, giving us a tableau of oriental colourings yet to be appreciated by the artists of our day. These hills and valleys are enlivened by the gay sleighs drawn by handsome horses which evidently enjoy the lively pace, and each equipage exchanges with passers-by salutes in a variety of dialects. "Isn't this too lovely for words?" is an English and American exclamation often heard from their occupants as we drive rapidly toward this "Ideal resort of the Tyrol." It is indeed a fascinating city, bright with cleanliness and abundant sunshine; having every imaginable winter amusement—skating tobogganing, ski-promenades, curling, military music, balls, good concerts, theatre, museum and library, English chaplain and daily church services, a British Vice-Consulate, and last, but not least, excellent hotels at very moderate terms.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

City Slums and Town Planning.

Sir John Stirling Maxwell, Bart., at a recent meeting held at Glasgow University under the auspices of the School of Social Study and Training, delivered a lecture on Garden Cities and Town Planning. Upon the latter branch of his subject he said that to pull down slums and turn out the inhabitants to go where they could was only to move on the problem, not to cure it In Liverpool, where a slum population of some thousands had really been rehoused, where every family turned out had been put into a new house under sensible superintendence, the result had been the disappearance of the slums. Though there had been a heavy direct loss on the undertaking, the hardheaded business men who had seen it through were convinced that indirectly the ratepayers had gained by diminution in the poor law, public health and police charges. In dealing with the other branch of the subject, Sir John referred to the first garden suburb in Glasgow, at Westerton. Thirty-five houses were now occupied. It was a gentle southerly slope, with a fine view over the Clyde Valley and the shelter of woods to the north, and was quite an ideal site.

The Research Defence Society held a public meeting of its Glasgow Branch on 19th inst. The object of the Society is to make generally known the facts as to experiments on animals in this country, and the regulations under which they are conducted. Lord Lamington presided, and among the speakers were Professor G. Sims Woodhead, M.D., and the Rev. Hubert Simpson. Questions were allowed from the audience, but no discussion. Much interest was evinced, and an overflow meeting was arranged under the presidency of Sir Hector Cameron, M.D.

The Very Rev. Principal George Adam Smith, in opening for the second day the

Aberdeen Red Cross and Health Service Exhibition,

spoke of the educational value of the exhibition. The work of the Red Cross, he said, was for times of peace as well as for times of war. They were all proud of what the British Society had done during the Balkan War. No fewer than ten units were sent out, comprising 220 persons, and they were the means of relieving over 16,000 cases. That was a record of which they might be proud, because the work was achieved at a great distance from the Society's own base and among a foreign people, and done with the purest motives of philanthropy. They had all read of the assistance and relief of the various national Red Cross Societies in great national disasters, such as floods, earthquakes and fires.

The Highlands and Islands Medical Service.

A circular has recently been issued by the Highlands and Islands Medical Service Board to School Boards, parish councils, etc., with reference to medical service administration in the Highlands. A conference of representatives of a large number of School Boards, etc., took place at Logierait on 18th inst., when an interesting discussion resulted. The district under consideration was the Highland district of Perthshire. Among other resolutions come to, it was agreed to represent that a uniform fee should be arranged for patients outside a ten miles radius, in cases where the income was £2 and under per week, to be supplemented by a grant from the Medical Service Board.

BELFAST.

Scarlet Fever.

A severe epidemic of scarlet fever is at present raging in Belfast. There are at present in the available infectious hospitals (Purdysburn Fever Hospital and the fever hospital in connection with the Belfast Union) about 500 cases. Last week there were 89 new cases notified. Some of the cases are of the virulent type, and the death-rate in hospital up to the present is 6 per cent, a figure much above the average.

Belfast Local Medical Committee.

At a meeting of practitioners residing in the County Borough of Belfast held on the 18th inst., the work of the first Local Medical Committee was reviewed and the new committee was elected. The late committee was elected in April, 1912, and held office for over a year and a half. It consisted of 60 members, representing every interest in the profession. Twenty-four meetings were held, the average attendance being 37. In connection with the work of the committee, there were eight meetings which the whole profession in the borough was summoned to attend, as the business was on these occasions of a specially important character. Sir John Byers, the Chairman, was only absent on two occasions. There were three Sub-committees—viz., for Finance, Complaints, and Tuberculosis. These sub-committees met frequently. The Tuberculosis Sub-committee had several conferences with the Public Health Committee of the City Corporation in reference to their tuberculosis scheme. Nothing definite has yet been arranged, but it is probable that £5,500 will be available for distribution among general practitioners for domiciliary work. There were several conferences with the Local Insurance Committee, and the Local Medical Committee of Belfast was the first committee in Ireland to arrange with the Health Commission to secure domiciliary treatment at a liberal rate of remuneration. The committee sent a representative to the Irish Medical Committee.

There has been much correspondence with the Friendly Societies, but up to the present no satisfactory arrangement has been come to with these bodies.

Dr. T. A. Davidson, the Secretary of the Local Medical Committee, has spared nothing in endeavouring to organise the work of the committee, and to him are due the thanks of the entire profession in Belfast for his arduous labours on their behalf.

It is said that Dr. Dubard, of Dijon, has invented an antiseptic varnish, which is to supersede the use of operating gloves by surgeons. It is composed of a mixture of essence of juniper berries and an alcoholised solution of menthol. On evaporation, a protecting and antiseptic varnish is left behind.

Society of Apothecaries of London.

The following candidates, having passed the necessary examinations, December, 1913, have been awarded the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery:—A. C. O. Brown, H. V. Capon, R. B. F. Fraser, J. de Silva, and J. E. Taylor.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE DISCOVERY OF THE LIFE-CYCLE OF THE ORGANISM OF SYPHILIS.

To the Editor of The Medical Press and Circular.

Sir,—The leading article in your issue of the 17th inst. calls for some comment.

The valuable recent discoveries were led up to by one of the observers finding, as did many others, that salvarsan, though it causes the spirochætes to disappear, is not the one-dose sterilising drug that its gifted inventor hoped it would prove to be.

The inference was that the protozoon passed through stages other than the spiral form; stages in which it was either inaccessible to or invulnerable against salvarsan.

Many years ago, from the natural history of the disease, its long latent period, its marked and fairly regular stages, and the varied yet graduated character of the lesions that usually mark its course, I deduced the *causa causans* of syphilis to be probably a protozoon. After having familiarised myself with the commoner pathogenic protozoa in animals and man, I looked for and found protozoa in the cells of the swollen epidermal margin of a rapidly spreading secondary ulcer. I am sure that no series of cell-forms put forward as the life-cycle of the protozoon of syphilis can be complete if it does not include the bodies that I demonstrated in 1894 (*a*) and also those I found later in a tertiary lesion and described in 1907 (*b*).

It may be noted that my first demonstration of protozoa in syphilis was made more than ten years before the spirochæte phase was described by the late Fritz Schaudinn in 1905.

I am, Sir, yours truly,
J. Jackson Clarke.

18 Portland Place, W.
19th December, 1913.

To the Editor of The Medical Press and Circular.

Sir,—It is, I think, certain that I am expressing the voice of a great number of your readers when I thank you for your leader of December 17th on the above subject. It is entirely luminous as regards the scientific aspect of the question, and it seems to demonstrate conclusively the claim of Mr. McDonagh to the credit of having first made the discovery of the life-cycle of the organism of syphilis. The controversy closely resembles that which took place over the discovery of the organism of sleeping sickness. Such disputes are, of course, supremely important to the parties immediately engaged; and the principles involved and the ethical questions raised vitally concern all scientific workers. If such disputes become more common it will be necessary for investigators to register and verify every step of their progress towards the establishment of a new fact, and it will be desirable to formulate some method whereby this may become feasible. It is, of course, occasionally the case that two workers approaching a problem from the same or even a different starting-point, and having no communication with one another throughout, arrive simultaneously at the same conclusion or make the same discovery. And it seems more probable that such a coincidence may occur more frequently when men are constantly meeting, discussing a problem, and mutually explaining their aims and methods. It is interesting to note that there is so much human nature in scientific men. It might be thought that their training and their work would produce and maintain for them a cold philosophical calm which would render them incapable of the sentiments of envy and uncharitableness which influence or dominate the minds of the bulk of common men.

I am Sir, yours truly,
A Working Pathologist.

December 19th, 1913.

THE QUESTION OF REFORM OF THE B.M.A.

To the Editor of The Medical Press and Circular.

Sir,—I quite agree that it is necessary at times to be frankly and apparently brutally outspoken in order to save a sick man; but we must be quite certain that such treatment is not fraught with danger to the patient. The reason why I did not analyse the issues raised as to the need of domestic and financial reform was that by so doing I should not have advanced the solution of the question in the slightest degree. May I refer to the concluding sentence of a letter I wrote to your journal on February 18th of this year:—"Let us, if we can, make practical suggestions for increasing the Association's financial stability, and I am confident that suggestions will be gratefully acknowledged and acted upon." This is the whole crux of the matter. Let us not attack the Association, but show it a better way. I entirely accept your explanation that your remarks were made in a spirit of friendly candour, as I have always regarded your journal as noted for its fairness in dealing with matters affecting the welfare of the profession. Your correspondent, "An Obscure Practitioner," has hit the right nail on the head when he attributes any shortcomings of the Association to the apathy of the majority of its members. With regard to the *British Medical Journal*, I should think that the greatest difficulty to be faced by the Editor in any attempt to cut down the size of the *Journal* would be to decide what part of it should be omitted. Some readers read the surgical papers, others the medical, still others the epitome. Cut down any of these, and at once the readers thereof would cry out, and probably write letters of indignation, pointing out that the very part of the *Journal* of importance had been omitted. With regard to its weight, doubtless it would be much lighter if all advertisements were omitted. If this were done, then the result would be not only serious financial loss, but great inconvenience to many of its readers, who, like myself, often refer to the advertisement columns to find an address or look up a preparation.

Now "the small meeting" referred to by "An Obscure Practitioner" probably represented the active members of the division—those who follow the work of the Association most closely. I sincerely trust that the prophecy of "An Obscure Member" that a very large proportion of the members will resign will prove false. To sum up the matter, we are all anxious to do our best for the Association. Then let us suggest methods of improving its financial position. Any suggestions which any of your readers will make I am confident will be gratefully acknowledged and, if practicable, acted upon. Then we shall not read of "some hazy future," but of a brighter present. Let us remember that so far as the apathy of the majority goes, we can only arouse interest by directly threatening their bread and butter. This the Insurance Bill achieved in a marvellous manner; but bad habits are overcome with difficulty, and the majority of the members of the Association again slumber.

I am, Sir, yours truly,
S. T. Ross.

Monkhams, Bedford.
December 17th, 1913.

FAITH HEALING AT UNIVERSITY COLLEGE.

To the Editor of The Medical Press and Circular.

Sir,—My attention has been drawn to "Scrutator's" letter in your issue of the 17th inst.

He wrongly concludes that I did not criticise Lord Sandwich's speech. I did strongly raise an objection to his remarks at the meeting, but his lordship's speech made good copy for the newspapers, and consequently the reports of the medical speakers were greatly abbreviated.

I was neither a member of the Committee of the

(*a*) "Transactions of the Pathological Society," 1895.

(*b*) "Transactions of the Royal Medico-Chirurgical Society," 1907. This subject is dealt with in the writer's "Protozoa and Disease," part ii., chapter viii.

Psycho-Medical Clinic, nor was I in any way connected with the movement. My presence at the meeting was due to a request to say a few words in support of the Clinic and the work that they hoped to carry out, and this I was glad to do, knowing that the Clinic was starting under the auspices of several well-known physicians and psychologists.

That the Chairman should have taken advantage of his position to enlarge upon his own personal power was disastrous to the cause he sought to support, especially as the newspaper reporters selected his speech for publication.

To withdraw their names and support was the only professional means available for the various medical men associated with the movement, and this they did at the earliest moment. Therefore, as medical objections to the Chairman's remarks were raised at the meeting, and as all the physicians connected with the Clinic withdrew their support immediately after, I fail to see what more could be done to prove to the public that Lord Sandwich's statements were not in accord with medical opinion.

I am, Sir, yours truly,

Maurice Craig.

54 Welbeck Street,
Cavendish Square, W.
December 19th, 1913.

OBITUARY.

DR. T. B. YOUNG, OF SUNDERLAND.

We regret to record the death, after a brief illness, of Dr. Thomas Beveridge Young, which occurred on the 10th inst., at his residence, 122, Herrington Street, Sunderland. The deceased, who was forty-four years of age, was a Scotsman, being born near Kilwinning, Ayrshire. He studied at the Royal Infirmary, Glasgow, and took the L.R.C.P. and S.Edin., L.F.P.S Glasg. After being at Newcastle-upon-Tyne for some time he came to Sunderland as assistant to Dr. Cunningham, with whom he stayed for five years, leaving to establish a practice at 122 Herrington Street 18 years ago. His recognised ability and genial manner quickly gained him a large practice, and he became one of the most popular medical men in the town, gaining a very large practice of an exacting character. He was frequently called as an expert witness in workmen's compensation cases at the Sunderland County Court. He first entered public life on February 25th, 1910, when he was elected a member of the Town Council for the Hendon Ward to fill the vacancy caused by the death of Councillor Thomas Summerbell. His professional knowledge was of great assistance to the Corporation, and as a member of the Health, Watch, Building, Cemeteries and Tramways Committees he rendered valuable service. He was a Liberal and a member of the Sunderland Liberal Club, and was also a well-known Freemason, being associated with the St. John's Lodge. Dr. Young married Miss Smith, of Hendon, and his widow and family of six children (five sons and one daughter), the eldest of whom is 19 years of age, are left to mourn his demise. Of remarkable geniality of temper and of great kindness of heart, he enjoyed a wide circle of friends, and was respected by none more than his patients.

LITERARY NOTES.

The seventh volume of "Daily Mirror Reflections," containing over one hundred cartoons from the pen of Mr. W. R. Haselden is pre-eminently one to place upon the waiting-room table. The subjects depicted are all topical, and several of them, notably those on "Weeping as a Cure" and the "Open-air Breakfast," have considerable medical interest.

* * *

The last two issues of the *Prescriber* for November and December contain much that is of interest to the practitioner. The first of these deals with tuberculin and the methods of its administration, together with a concise review of tuberculin therapy. A critical summary of the more recent works on tuberculin treatment is also given. The second is occupied with original articles, some useful prescribing notes, and a review of therapeutic progress. This up-to-date little monthly is published at 137 George Street, Edinburgh.

* * *

The twenty-fifth anniversary number of the *British Journal of Dermatology* was issued last month. It contains three interesting retrospects by Sir Malcolm Morris, K.C.V.O., Dr. J. J. Pringle, and Dr. J. Galloway, three former editors of the *Journal*, the former of whom compares the "refined and realistic half-tone illustrations which now at once elucidate its teachings and embellish its pages," which are certainly to be preferred "to the crude chromo-lithographs which stare one in the face as one turns over the leaves of the first volume." To be of any use at all for illustrating dermatological affections, photographs, plain or produced by the colour process, are alone permissible.

MEDICAL NEWS & PASS LISTS.

Health Exhibition at Aberdeen.

An exhibition of Red Cross and National Health Service work, under the auspices of the British Red Cross Society, was formally opened at Aberdeen last week by the Earl of Aberdeen. There are sections devoted to Red Cross work, infant welfare, food and cookery, nursing, school hygiene, personal hygiene, and housing, with lectures and entertainments and numerous demonstrations, while the cinematograph is employed to illustrate. Lord Provost Maitland presided. In opening the exhibition, Lord Aberdeen said the scheme was only formulated in October, but from the first there had been a magnificent display of steady energy, zeal, and co-operation, and he knew that the exhibition would in its result prove worthy of all that trouble. He read the following telegram from Lady Aberdeen, who, he explained was detained at Dublin in connection with the transference of the sanatorium to the municipality there: "The keynote of the exhibition is intended to be a demonstration of the possibilities of Red Cross and all other health work needing co-operation between official and voluntary workers. Please convey my warmest greetings and regrets at being absent." Professor W. H. Thomson (Dublin) in the evening gave the first of the series of health lectures.

The Hospital Sunday Fund.

The annual meeting of the constituents of the Metropolitan Hospital Sunday Fund was held at the Mansion House last week, Alderman Sir J. Bell presiding. In their report the Council stated that this year's collection, the 41st, resulted in a total of £64,991 15s. 1d., a decrease of £2,981 compared with the previous year. In the various places of worship £28,434 was collected, being £7,432 less than in 1912. A portion of this decrease was accounted for by the discontinuance of the practice of adding donations to the amount of about £4,000 to the collection at St. Paul's Cathedral. The sum credited to the cathedral in 1913 (£287 15s. 3d.) was the amount actually collected plus two donations added by request of the donors. The net falling off in the church collections was therefore about £3,000.

It was moved that the date of the next Hospital Sunday be June 14th, 1914, and this was agreed to.

A motion to submit to the consideration of the Council a resolution declaring that "no grant be given to any hospital having a vivisection laboratory attached to its medical school on the ground that the practice of vivisection is directly opposed to the teaching of Christ" was rejected by a large majority.

Fatal Accident to a Medical Man.

At the inquest last week on Dr. Wm. Chas. O'Donoghue, of Liverpool, who met with a terrible death in a Cheshire lines train at Flixton, evidence was given that he was taken ill on the way to Liverpool from Manchester, and when he put his head out of the window was struck by a passing train.

Supt. Hogg, of the Cheshire lines, said the doctor was struck by the handle of a van door of a passing train which by some means had been left open.

The jury returned a verdict of "Accidental death," and found there had been negligence on the part of railway servants in leaving the door open.

The National University of Ireland.

The returns of the matriculation examinations, summer and autumn, 1913, show that 736 candidates entered for the examinations; of these 457 passed and became matriculated students of the University. In addition, there have been matriculated on the results of the intermediate senior grade and other public examinations, 95 students, making a total of 552 students matriculated in the year 1913 to date, December 16th.

University of London.

The following have passed the M.D. Examination for Internal and External Students:—

Medicine.—*T. Beaton, B.S., Charing Cross Hosp.; W. E. Burrows, B.S., B.Sc., Middlesex Hosp.; Hazel H. Cuthbert, B.S., London (R.F.H.) Sch. of Med. for Women; R. R. Elworthy, B.S., Westminster Hosp.; W. C. Fowler, B.S., Univ. Coll. Hosp.; G. Hadfield, B.S. (University Medal), St. Bartholomew's; R. H. H. Jolly, B.S., Charing Cross Hosp.; Cicely M. Peake, B.S., London Sch. of Med. for Women; E. E. A. T. Rigg, B.S., H. D. Rollinson, B.S., and A. R. Spencer, Univ. Coll. Hosp.; G. E. S. Ward, B.S., Middlesex Hosp.; G. R. Ward, B.S., Westminster Hosp.

Mental Diseases and Psychology.—R. Brown, B.S., Univ. Coll. and Westminster Hosps.; A. A. W. Petrie, B.S., Univ. of Edin.

Midwifery and Diseases of Women.—D. J. Harries, B.S., Univ. Coll. Hosp.; R. Larkin, Guy's; A. A. Straton, B.S. (University Medal), St. Mary's.

Tropical Medicine.—R. Kelsall, B.S. (University Medal), Manchester Univ. and London Sch. of Trop. Med.

*Obtained the number of marks qualifying for the University Medal.

University of Oxford.

The following have satisfied the examiners for the Diploma in Public Health:—

Part II.—C. H. Browning, R. H. Deans, E. T. H. Lea, T. J. Mackie, and H. K. Ward.

Part I.—Effie G. Brander, C. H. Browning, N. A. Coward, W. Gilmour, C. B. Gratte, F. R. M. Heggs, H. L. Hopkins, E. T. H. Lea, T. J. Mackie, A. B. Mitchell, J. Powell, E. Ll. N. Rhodes, H. W. White, and J. H. Wood.

University of Cambridge.

At a Congregation on December 19th the following degrees were conferred:—

M.C.—K. J. A. Davis, King's; R. M. Vick, Jesus.

M.B. and B.C.—H. Y. M. Mansfield, Emmanuel.

B.C.—J. H. Newmarch, Pembroke; T. H. Oliver, Caius.

University of Liverpool.

The following have qualified for the diploma in Tripical Medicine:—C. M. Austin, M.B. Ch.B., S. S. Banker, L.M. and S., L.R.C.P., M. Carrasco, L.M. and S., J. M. Clark, M.B., B.Ch., E. C. Hepper, L.R.C.P., I. O. K. Khaw, M.B., Ch.B., J. C. Noronha, M.B., B.S., E. O'Connor, B.M., B.Ch., A. B. Pestonji, F.R.C.S., L.R.C.P., E. A. Smith, L.R.C.P. and S., S. D. Stewart, M.B., Ch.B., E. E. Wilbe, L.S.A., H. F. Wilson, M.B., B.S.

University of Edinburgh.

The following received the degree of M.D. on December 17th:—*N. H. Bolton, **C. J. G. Bourhill, *G. Ll. Brunton, *G. C. Burgess, A. C. Court, *G. F. Fismer, J. Hewat, *J. P. Litt, *W. Macdonald, **N. D. Mackay, J. S. Manson, E. A. Milner, A. E. Moore, *T. P. Noble, *A. Z. Philips, J. Robinson, W. S. Thomson, *H. B. Watson.

The Leckie Mactier Fellowship of about £80 for three years has been awarded to W. Q. Wood, M.B., Ch.B.

** Highly commended for Thesis.

* Commended for Thesis.

Royal College of Surgeons of Edinburgh.

At a meeting of the College held recently, the following gentlemen, having passed the requisite examinations on 9th October, 1913, were admitted Fellows:—

John Bright Banister, M.D.Camb., M.R.C.P.Lond., Edmund Ewart Brown, M.B., Ch.B.New Zeal., Norman Huthnance Bye, M.R.C.S.Eng., L.R.C.P.Lond., Hugh Palliser Costobadie, M.R.C.S.Eng., L.R.C.P.Lond., Francis James Coutts, M.D.Lond., M.R.C.S.Eng., L.R.C.P.Lond., Arthur Dickson, M.D.Edin., etc., Charles Coyne Elliott, M.D. Western Univ., Canada, John Charles Boileau Grant, M.B., Ch.B.Edin., Norman Walter Mackworth, M.B., Ch.B.Aberd., Indian Med. Service, Carl Theodorus Moller, L.R.C.S.E., (Triple Qual.), M.B., Ch.B.Edin., Spencer Mort, M.B., Ch.B.Glas., Frederick Charles Pridham, M.R.C.S.Eng., L.R.C.P.Lond., Adolphe Henry Seelenmeyer, M.B., Ch.B.Melbourne, Reginald Eccles Smith, M.B., Ch.B. Leeds., John tennant, M.B., C.M.Edin., and Hermann Watson Webb, M.B., Ch.B.Edin.

Royal College of Surgeons in Ireland.

The folowing candidates have passed the First Dental Examination, Winter, 1913:—Peter E. F. Dunn, Patrick S. McCabe, Frederick Arthur McKinney, Thomas G. O'Connor, Stephen L. Wilson.

Final Dental Examination.—Gerald J. M. Dobbin, Robert L. O'Grady.

Primary Fellowship Examination.—Hugh M. Alexander, Norman McC. Boyce, Joseph V. Cope, King Elmes, Arnold K. Henry, Charles A. R. McCay, Balwant Rai, Hassan Suhrawardy.

Final Fellowship Examination.—Hubert C. Carden, Gianchand T. Hingorani, Oriel J. O. O'Hanlon, William C. P. Smyly, Philip J. Timony, Kathleen Wall.

Conjoint Examinations in Ireland.

The following candidates have passed the winter examination of the Royal Colege of Physicians and the Royal College of Surgeons:—

Preliminary Examination.—J. J. Brennan (passed with honours), Mary C. Albuquerque, John T. Alcock, Edward S. Becker, Vincent A. Carroll, Stephen Conway, Thomas H. Cooper, Robert J. Cussen, James Danaher, Benjamin Epstein, John A. Flynn, Stopford J. Halpin, J. A. Hamilton, William R. Henry, Norman L. C. Irwin, Patrick McAndrew, P. J. McGing, Charles McGlade, Edward J. Magner, Martin R. Morris, C. J. H. Mouritz, George O. Nightingale, Hugh O'Neill, James C. Rowan, V. A. Stack, Paul G. L. W. Suys, James F. Thornton, Richard Walters, F. J. Walsh, Robert P. Williams.

First Professional Examination.—Joseph Cusack, Louis Finnegan, Patrick J. Flood, William F. Moorhead, William H. Pierce, William H. Sexton.

Second Professional Examination.—D. Boland, Douglas L. Crowe, E. M. T. Crymble, T. Curran, R. D'Alton, Miss E. M. Lloyd-Dodd, E. C. H. Ewart, D. C. Kelleher, D. Lane Kelly, J. R. Little, E. T. McElligott, M. F. Murphy, P. O'Connell, Israel I. Sharpe, G. C. L. Woodroffe, J. Young.

Third Professional Examination.—R. M. Alcorn, S. Brown, S. J. M. Cairns, W. J. Dunlop, J. C. Fergusson, C. E. H. Gater, J. J. Gray, D. Kelly, J. Magner, W. G. D. McCall, F. R. H. Mollan, P. J. Murphy, J. A. Musgrave, J. O'Brien, P. J. D. O'Malley, Miss M. F. R. Welply, H. J. Villiers.

Final Professional Examination.—Richard J. Aherne, William K. Carew, James Crowley, James P. Fitzpatrick, John J. Keyms, Patrick Loy, Bruce Malaher, Samuel D. G. McEntire, D. Murphy, James V. Ryan, Patrick Rowan, James Sandys, Cecil R. Wallace, Robert A. Wright.

Diploma in Public Health Examination.—Henry H. Scott, M.D.Lond., with honours; George E. Beggs, L.R.C.P. and S.I., Jennette C. Hargrave, L.R.C.P. and S.I., Charles C. Iles, M.B.Edin.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

M.R.C.S., L.R.C.P. (South Shields).—The abnormally mild weather appears so far as one can judge by the weekly official statistics not to have interfered with the public health, which is somewhat surprising. In fact, the mortality is, if anything, somewhat under the average for the time of year, both in the metropolis and in most of the provincial large towns. Even in Dublin, where there is much unusual suffering in consequence of the prolonged strike, the death rate has not gone up.

WHEN CHRISTMAS DAY BE ON A THURSDAY.

As Christmas Day this year falls on a Thursday, it may be interesting to refer to an old poem which we found the other day among the Harleian MS. in the British Museum. It begins thus:—

> "If Christmas Day on Thursday be,
> A windy winter you shall see;
> Windy weather in each week,
> And hard tempests, strong and thick;
> The summer shall be good and dry,
> Corn and tracts shall multiply.

Well, we must "wait and see."

The Sunday at Home for December.

M.B (London, S.W.).—The classical "blue line" upon the gums is not infrequently absent in cases of lead poisoning, especially in persons who pay careful attention to dental hygiene. It is best seen when there is marked recession of the gums.

R. S. L. (Hampton Wick).—The subject is too technical to interest the majority of our readers. It would be better to offer the paper to a trade journal.

THE LEAGUE OF MERCY.

It was stated at the 14th annual meeting of this League held last week that the approximate totals for the year amounted to £17,227. This is a falling off as compared with last year, but last year there was a large contribution sent anonymously in response to the request for an extra £1,000 to make the contributions of the League to the hospitals up to £200,000. The League has now contributed to King Edward's Hospital Fund £201,034, making, with the £14,383 given to extra-metropolitan hospitals a total of £215,417 raised in 14 years.

F.R.C.S.Edin. (Crewkerne).—We are informed that the most up-to-date work dealing with medical mission work is *The Appeal of Medical Missions*, by R. Fletcher Moorshead, M.D., F.R.C.S. Sir Andrew Fraser, whose foreign experience gives him a claim to be heard, writes a cordial introduction. Messrs. Oliphant, Anderson and Ferrier are the publishers.

Appointments.

Gordon, J. L., M.D., Ch.B.Aberd., Acting Medical Superintendent at the Fountain Temporary Asylum.

Pratt, J. J., Colonel I.M.S., Surgeon to the Seamen's Hospital.

Rotherham, Arthur, M.B., B.C.Cantab., a Commissioner under the Mental Deficiency Act, 1913.

Sherlock, E. B., M.D., B.Sc.,Lond., D.P.H., Medical Superintendent of Darenth Industrial Colony.

Vacancies.

Hull and Sculcoates Dispensary.—Resident Surgeon. Salary £220 per annum with extras. Applications to J. E. H. Stickney, Hon Secretary. (See advert.)

Down District Lunatic Asylum.—Junior Male Assistant Medical Officer. Salary £170, rising to £200 per annum, with full extras valued at £100 a year. Applications to Resident Medical Superintendent. (See advert.)

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Denbigh (Denbigh), Glastonbury (Somersetshire), Pontyberem (Carmarthenshire), Slievereagh (Co. Cork), Teddington (Middlesex).

East Sussex Hosital, Hastings.—Senior House Surgeon. Salary £100 per annum, with residence, board, and washing. Applications to the Secretary.

Nottingham General Dispensary.—Resident Surgeon. Salary £220 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

County Asylum, Whittingham, Preston.—Assistant Medical Officer. Salary £250 per annum, with board, furnished apartments, and washing. Applications to the Medical Superintendent.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to Medical Superintendent, Asylum, Maidstone.

Somerset and Bath Asylum, Cotford, Taunton.—Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, fuel, lighting, washing, and attendance. Applications to the Medical Superintendent.

Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to the Hon. Secretary.

Royal Isle of Wight County Hospital, Ryde.—Resident House Surgeon. Salary £125 per annum. Applications to the Secretary.

County Asylum, Chester.—Third Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Laboratories of Pathology and Public Health.—Fifth Assistant Pathologist. Salary £170 per annum. Applications to the Secretary, Laboratories of Pathology and Public Health, 38, New Cavendish Street, W.

Births.

Barnes.—On December 15th, at Eye, Suffolk, the wife of Henry E. Barnes, M.D.Lond., of a daughter.

Beck.—On December 21st, at Bromyard, the wife of Ashton Beck, M.B., of a daughter.

Cunningham.—On December 13th, at Boksburg, North Transvaal, the wife of Norman Rowsell Cunningham, M.R.C.S., L.R.C.P., B.A.Cantab., of a son.

Fernie.—On December 13th, at 24, Crooms Hill, Greenwich, the wife of C. H. Fernie, M.R.C.S., L.R.C.P., of a son.

Gunn.—On December 18th, at Neston, Cheshire, the wife of George Gunn, M.D., F.R.C.S.E., of a son.

Jobson.—On December 19th, at Trelyon, Ilford, the wife of Dr. T. B. Jobson, of a son.

May.—On December 19th, at Woodleigh, Ware, Herts., the wife of George E. May, M.R.C.S. and L.R.C.P., of a son.

Marriages.

Cruise—Woolcombe-Boyce.—On December 13th, at St. George's, Hanover Square, W., Richard R. Cruise, F.R.C.S., of 85 Harley Street, W., only child of the late Francis Cruise, of Rahood, Co. Meath, to Margery Barbara, only child of the late Hugh Woollcombe-Boyce, Capt. 6th (Carabiniers) Dragoon Guards.

Garnett—Crawford.—On December 18th, at the Cathedral, Glasgow, Graham Hogg Garnett, M.D., of Greenwich, elder son of the late Harry Garnett and Mrs. Garnett, of Georgetown, Demerara, to Susan, youngest daughter of the late James Crawford, of Shawton, Glassford, and Mrs. Crawford, of Stonelaw Tower, Rutherglen, N.B.

Hayman—Atwood.—On December 18th, at St. Barnabas Church, Tunbridge Wells, Charles Augustine Hayman, J.P., M.D., F.R.C.S., of Kingston Villa, Richmond Hill, Clifton, Bristol, to Elizabeth Caroline, daughter of the late Captain Atwood and Mrs. Atwood, of Brixton.

Langdon—Smith.—On December 20th, at St. Stephen's, Ealing, William Morgan Langdon, M.R.C.S., L.R.C.P., of Hillside, North Tawton, Devon, second son of Captain C. H. C. Langdon, R.N., of Winchester House, Bedford Hill, Balham, to Rosalind Aline, only daughter of Commander C. V. Smith, R.N., of 25 Ravensbourne Gardens, Ealing, and the Hydrographic Department, Admiralty.

Deaths.

Fagge.—On December 20th, at Hythe House, Lutterworth, Alice, the wife of Herbert W. Fagge, M.R.C.S., L.S.A.

Harris.—On December 15th, at Mildenhall, Suffolk, Frederick Hills Harris, M.R.C.S., L.S.A., in his 91st year.

Mole.—On December 18th, at Swansea Hospital, Alfred Ernest Mole, M.B., C.M.Edin., late of Reynoldstone, Glam., in his 45th year.

Rutter.—On December 16th, at 11 Wilbury Gardens, Hove, Joseph Rutter, M.D., in his 80th year.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CXLVII. WEDNESDAY, DECEMBER 31, 1913. No. 27.

NOTES AND COMMENTS.

An Awkward Dispute.

IN such a many-sided science as medicine there is always plenty of opportunity for differences of opinion among its professors upon any point that is at all debatable. The public are not a little amused when swords are crossed by medical men over some professional matter regarding which many different opinions may be held quite legitimately. During the past few weeks a somewhat protracted controversy has been raging at Cheltenham owing to the differences that have arisen between Dr. J. H. Garrett, the Medical Officer of the Borough, and Dr. Alice Burn, the assistant and School Medical Officer, in the matter of food reform. It is reported that the former believes in the value of an ordinary mixed diet, while the latter not only advocates the adoption of vegetarianism, but has given lectures in her own time advancing her views. Dr. Garrett, holding that, as Medical Officer, he was responsible for the medical policy of the borough, objected to the lectures being continued after he had announced that they were contrary to his policy, and he declared that either he or his assistant should resign. Dr. Alice Burn held to her point, and Dr. Garrett therefore tendered his resignation. At this stage the Board of Education stepped in, and Sir George Newman, having heard both sides of the case, decided that Dr. Burn should either apologise to Dr. Garrett or resign her position. Dr. Burn has chosen the latter alternative, whereupon the Cheltenham Education Committee agreed to allow Dr. Garrett to withdraw his resignation. Apart from the question of the comparative values of a flesh or a fruit diet, it may be held that it is unwise for any subordinate officer to advance in public opinions directly opposed to those of the head of the department. A house-surgeon who treats an in-patient in an exactly opposite manner to that ordered by his chief, unless he knows that such treatment would be directly harmful, is wanting in loyalty, and, similarly, an assistant medical officer of health who does not carry out the wishes of his principal can hardly be said to act with that *esprit de corps* which should characterise the work of an important department of municipal life.

Is Debility a Disease?

EVERY medical man knows that there are many cases in which disability to work results, not from any real morbid entity, but from a state of general weakness. The strictest medical examination will often fail to reveal any very marked departure from the normal, but, nevertheless, the patient insists that he is quite unable to follow his ordinary occupation. The word "debility" is frequently used upon medical certificates for exemption from work, though it cannot be said that the term is strictly scientific, nor does it claim to be a diagnosis. A case was tried the other day at the Leicester County Court, before his Honour Deputy-Judge Woodgate, in which a married woman claimed an injunction from the Insurance Section of the Co-operative Wholesale Society, Limited, to restrain them from refusing to accept for her as evidence of her claim to sickness benefit under the National Insurance Act a medical certificate stating that she was suffering from debility, because no specific disease was mentioned. Medical evidence was brought forward to show that debility was a sufficient cause for disablement, and, therefore, a suitable word to appear upon a medical certificate. A verdict was given for the plaintiff on the ground that the society was bound by the text of its own rules, and there appeared to be nothing in these against the acceptance of the wording of the certificate. It may be urged that debility lasting for more than a few weeks may be merely a symptom of some graver affection, such as anæmia, early phthisis, or Addison's disease. In the interests of science, it is most desirable that ambiguous terms should be avoided, and in order to prevent legal disputes it is better to employ a more precise description for the cause of incapacity for work upon medical certificates.

Biplane "Looping."

IT is not sufficient merely to fly nowadays, for aerial locomotion almost ceases to create excitement among the spectators. To be really up to date the would-be airman must be prepared to cause a temporary sensation by flying upside down. This inversion of the aerial order of things cannot be without some influence upon the animal economy of the flier. The world was startled the other day by the daring feats of Pégoud and Hucks in "looping" with a monoplane, and now Chanteloup, the French airman, has succeeded in going through a similar performance with a 60-h.p. Caudron biplane in half a gale. A medical man has contributed to the *Times* a few interesting notes regarding the physical condition of M. Chanteloup at the conclusion of his remarkable flight at the Hendon Aerodrome last week. Contrary to expectation, his pulse-rate was found to be only 88, and the pulse quiet and steady. It was also regular, and free from the least suspicion of a tremor or jerkiness. There were none of the characteristic twitchings of the tendons at the wrist so often seen as the result of some unusual muscular effort. The airman's eyes are said to show a "very wide range of lateral oscillation, due, no doubt, to exceptional development of the ocular muscles." A high degree of nervous control and self-possession is essential for all who aspire to conquer the art of flight, and with this M. Chanteloup certainly seems to be well endowed. Considering the exceptional demands made upon the circulatory and nervous systems in navigating the air, it seems almost a truism to assert that none should attempt to fly who are the least degree abnormal in these respects.

Infection in Books. A mild sensation is periodically caused by the announcement in the lay press that infectious diseases are transmitted by the lending department of free libraries. Anyone familiar with the odour of returned volumes of popular fiction can hardly help comparing it with that of a living-room in which the window is never open. Sometimes it is stale tobacco, or else it is a washed-out perfume that gives the characteristic odour to the well-worn yellow-back, whose pages bear occasional trace of having been the companion of some solitary individual at mealtimes. Of the germ-contents of such books little has been said, but there can be no doubt that both covers and pages harbour a large number of micro-organisms, pathogenic and otherwise. According to the librarian of the Kaiser Wilhelm Academy in Berlin, tuberculosis is the disease most likely to be spread by books, and after this come diphtheria, scarlet fever, and small-pox. It is said that inoculation experiments with guinea-pigs have given positive results, these animals having died of tuberculosis and septicæmia after injection with aqueous extracts of old books. Happily the modern municipal free library, with its clean and orderly counters and shelves, is so well managed that little need be feared on the score of infection, for the rules are most stringent in connection with books lent to readers in cases where any infectious disease exists. It should be quite possible to provide a clean, renewable cover every time a book is given out to a fresh reader. In scientific and medical libraries, of course, the risk is practically non-existent. A special providence seems to be attached to bibliophiles, for it has not been proved that the vendors of secondhand books suffer in health more than those who deal in new volumes only.

Coroner and Medical Evidence. From the North of Ireland comes an extraordinary story of the conduct of a coroner in regard to the summoning of a medical witness. The jury, having heard the evidence submitted to them, demanded that the medical man who had attended the deceased should be called. The coroner, saying that it was not a matter for the jury which witnesses should be called, refused their request, and on their expressing their inability to bring in a verdict, kept them locked up for four hours. The jury remaining obdurate, the coroner then examined another medical man whom he had ordered to examine the body. The practitioner who had attended the deceased was not examined, though he was present in court. We fail entirely to understand the position of the coroner. The point appears to be covered by Sec. 34 of 9 and 10 Vic., cap. 37: "And be it enacted, that whenever it shall appear to the majority of the jurors upon any inquest that the cause of death has not been satisfactorily explained by the evidence of such medical practitioner, or of the witness or witnesses who shall have been examined at such inquest, it shall be lawful for the said jurors, by a requisition in writing, to call upon the coroner to issue his summons for the attendance of some other legally qualified medical practitioner or practitioners; and if the coroner, on the receipt of such requisition, shall refuse or neglect to issue his summons as aforesaid, he shall be deemed guilty of a misdemeanour." The matter is one which should be taken up by the Irish Medical Association.

LEADING ARTICLES.

THE PRINCIPAL MEDICAL EVENTS OF THE YEAR 1913.

It is not an easy matter adequately to summarise within a small compass the most important medical features of the year which expires to-day. One event, however, stands out prominently from among the rest, namely, the great International Medical Congress which met in London in August under the presidency of Sir Thomas Barlow. The work of the twenty-six sections of this huge conference was duly reported in our columns at the time, and it was the general opinion that the gathering was an unprecedented success. The increased attention paid by the medical profession to the prevention and cure of syphilis, aided by the powerful stimulus provided by the resolutions passed at the Congress, led to the formation of a Royal Commission on Venereal Diseases, under the chairmanship of Lord Sydenham, which has already held several sittings. Shortly after the institution of this inquiry, a valuable report upon venereal diseases, by Dr. R. W. Johnstone, was issued by the Local Government Board. Further progress in syphilology during the year may be measured by the discovery by Noguchi of the treponema pallidum in the central nervous system in cases of general paralysis, and by the demonstration by McDonagh of the life-cycle of the same organism, and the working-out by the same observer of its bio-chemistry. Considerable activity has been shown in connection with tuberculosis, notably in the more general institution of tuberculosis medical officers by local authorities, and the better local administration in England with regard to sanatorium benefit under the National Insurance Act. The final report of the Departmental Committee on Tuberculosis was issued in March, and in February the Order with respect to the compulsory notification by all practitioners of all forms of tuberculosis came into effect. Much interest was aroused by the discovery of several cases of pellagra indigenous to this country. The resemblance of this disease to certain skin and mental disorders has been reported upon by various observers, notably by Sambon and Box, and the former has expressed his view that pellagra is connected with the simulium fly. The Mental Deficiency Act of 1913 marks an important stage in the growth of the responsibility of the community for a large class of its weakest and most backward members. The Colonial Office has shown that it is fully alive to the hygienic needs of many of our fellow-subjects by appointing a Committee to report upon the spread of disease in Africa by wild animals and tsetse flies, and also a small Commission to inquire into the nature and frequency of West African coast fevers. The British Medical Association held a successful annual meeting at Brighton, when the motion to form a trade union was defeated by a heavy poll of representatives. An important outcome of this decision has been the formation of the National Medical Guild, designed by its promoters to work in conjunction with the British Medical Association, and not in opposition thereto. One of the most important legal cases during the year was the vivisection libel suit, which resulted in a verdict for the defendants, consisting of the *Pall Mall Gazette* and Dr. Saleeby, after a trial lasting sixteen days. Among other interesting medical events may be mentioned the celebration of the Livingstone Centenary and the appointment of a medical man, Dr. Robt. Bridges, as Poet Laureate. Space will not permit us to enumerate the many important lectures delivered before the Royal Colleges of Physicians and Surgeons, neither are we able to record the detailed progress of every special department in medicine or surgery. It will be seen, however, that the *annus medicus,* 1913, has, in more ways than one, proved a worthy successor of its forerunners.

COMPULSORY OPERATIONS UNDER THE CHILDREN ACT.

A recent appeal case, to which a brief allusion was made in our last issue, is of considerable medico-legal interest, and bears materially upon the administration of the Children Act, 1908. In January last one Jackson was proceeded against under the above-mentioned Act for having unlawfully and wilfully neglected his child, Hilda Jackson, in a manner likely to cause unnecessary suffering or injury to health. The facts brought in support of that charge were: That the said child, on January 18th, 1913, was and had for some time previously been suffering from adenoids, which were causing mental dulness, impaired breathing, and deafness and some anæmia, and that consequently the child was suffering injury to her health which required to be remedied, and that the only possible remedy was a surgical operation for the removal of the adenoids. That the respondent on the said January 15th, 1913, had neglected and refused, and did then neglect and refuse, to allow the said child to undergo the operation necessary for the removal of the adenoids. That the said operation was not a dangerous one, but that in all probability it would necessitate the administration of an anæsthetic. That the respondent and his wife (the mother of the child) did not consider an operation necessary and did not believe in operation, and refused to allow the child to go to the infirmary to have the operation performed." It should be noted that, beyond the refusal to allow the said operation to be performed no evidence of neglect of the said child by the respondent was given. After considering the evidence submitted to them the justices came to the conclusion that the respondent was under no legal liability to allow the operation to be performed, and that the refusal to allow such operation to be performed did not constitute neglect to provide adequate medical aid within the meaning of the Act. The question for the Appeal Court was whether the justices, upon the statement of facts, came to a correct determination and decision in point of law. The three judges in the higher court —Mr. Justice Darling, Mr. Justice Avory, and Mr. Justice Atkin—agreed in the view that the magistrates should have convicted, and the case was accordingly sent back for re-hearing. In delivering judgment, Mr. Justice Darling said the justices must decide each particular case as it arose, and it was no answer in law that the parents did not think an operation necessary or did not believe in operations at all; though the refusal to allow an operation was not necessarily such a refusal to provide medical aid as to amount to wilful neglect within the section. The justices must, in deciding whether there had been wilful neglect, consider in each case what was the nature of the operation, and the reasonableness of the refusal to have it performed. In concurring with that view, Mr. Justice Avory added the important observation that in each case the justices must consider who the person was who had required the operation to be performed—whether it was ordered by a qualified medical man, or whether it was merely a suggestion of some irresponsible person. That remark has a vital bearing upon the ultimate practical value of the Children Act. Upon the introduction of the measure we pointed out how potent a weapon it placed in the hands of magistrates and coroners for the suppression of quacks and quackery. Mr. Justice Avory's view in this case may be commended to Mr. Lloyd George's Insurance Committees, who are recognising certificates granted by herbalists and other medically unqualified persons. So far as adenoid operations are concerned, the case has established the important principle that the refusal of parents to permit operation is unlawful, but to that general proposition there are certain modifying conditions

---

CURRENT TOPICS.

British Medical Association.

An extraordinary general meeting of members of the British Medical Association was called at 2 p.m. on Tuesday, December 23rd, at the Strand offices of the Association. As the necessary quorum of one hundred members was not present, the meeting was adjourned until Tuesday, the 30th, at the same hour. It should be explained that, by the rules of the Association, no quorum is fixed for an adjourned meeting of the kind, so that were only one member present he would be able to conduct the whole business. As the business before the meeting is presumably to settle the question of raising the subscription to £2 2s., and of the proposed extension of borrowing powers, it is evident that the decisions arrived at are of vital importance to the Association. It is much to be regretted that the press of urgent business has delayed matters of such weight and urgency to the last few days of the year. It is clear that few provincial members would be able to journey to London a couple of days before Christmas. In London, again, some members would be out of town, while others, whether consultants or private practitioners, would find it impossible to attend a meeting at 2 p.m. in the holiday time. We can have nothing but commiseration for a Council that has been forced to submit decisions of supreme moment to a meeting summoned in the face of so many difficulties. It is obvious, moreover, that any member disapproving the decision of the extraordinary general meeting desiring to send in his resignation, would have but one day of the year left in which to give notice of his withdrawal. In other words, the majority of members are bound by the decision of December 30th, 1913. It is a matter of some surprise that the attention of members has not been called to the failure of the extraordinary meeting of the 23rd in the issue of the 27th, and that the objects of the meeting and its full significance were not dealt with editorially—that is to say, apart from a brief formal announcement in the Supplement, without a word as to the nature of the business to be discussed. Possibly we have been misinformed as regards the agenda, but in any case the information vouchsafed by the executive cannot be regarded as adequate and satisfactory.

Unnecessary Anatomy.

Medical education is a vexatious subject. Its discussion is daily and its solutions several and sempiternal. Professor Harvey Cushing thinks we have too much of the rudiments. It is true that the student spends an enormous amount of time at anatomy. In the lecture-theatre, at demonstrations and dissections he learns, or has opportunities of learning, much more than will ever be of use to him. Details of human structure are forced into the student on the slightest provocation. The essence of education is selective forgetfulness, and the thing most men start forgetting with the greatest rapidity and ease is such facts as the function of the dentate fascia and the exact origin of the components of the erector spinæ. And it is a good thing that they do. Except in a few specialties, the medical man has no use for such infinitesimal information. The general practitioner—and, after all, he is the average and the important medical man—needs breadth of knowledge primarily, not depth. He wants to know when a case is beyond him. The specialist cannot know too much of his subject, and, with his comparatively narrow objective, we have a right to expect a good deal of detail from him. But it is as absurd to teach the everyday doctor all the fine points a monomaniac professor wishes him to know, as it is to make a dentist qualify in reducing a dislocated hip. To-day, of course, we do both. We all had to learn a great deal of what was quite unnecessary. But it is sheer spite to condemn posterity, even if it has done nothing for us, to share our toils without the need.

The Plumber of the Future.

The ordinary citizen, cumbered with the multifarious business of life, is apt to take many things on trust, and to bestow little thought on the hidden agencies that preserve the comfort and safety of his life. How many of us, for instance, think of the debt of gratitude we owe to the plumber, whose handiwork is absolutely necessary to the sanitary safety, comfort and convenience of the modern household! Think what must happen were the plumbing of the water supply, or the drains, or the hot-water pipes, or the gas or electric lighting systems to go seriously wrong! The inmates of a house suffering from such a break-down would be exposed to the risks of sewage and of water-borne disease, not to mention drought, darkness, coal-gas poisoning, fires and explosions. To put the matter in a nutshell, good plumbing is a first essential of good housing. As things go, however, there is no guarantee that a plumber has done his work properly. To remedy this state of affairs has long been the desire of the Plumbers' Company, a body founded by Royal Charter in the time of King Edward III.—1325 to 1375. At that time it was customary for each plumber to distinguish his own handiwork by a private mark of his own. That practice the Plumbers' Company wish to revive, and it has also spent large sums of money in promoting legislation with a view of securing the proper training and registration of plumbers. There is a good deal to be said in favour of this policy, some idea of which can be gained by reading the report of the speeches at the recent Plumbers' Livery Dinner, which will be found elsewhere in our columns; indeed, a similar principle might be extended with advantage to various industries other than that of plumbing.

The Season's Eatings.

There is often a lull in the doctor's daily work about Christmas-time, but it is the lowering calm that goes before the storm. Christmas celebration does not often indicate cerebration in the celebrants. Why a festival primarily religious should be made the occasion for over-working the œsophagus, stretching the stomach, and generally abusing the alimentary tract is one of the hidden mysteries, the frequency of whose occurrence alone has numbed our power of astonishment. A recurrent miracle becomes a platitude. Some medical men have lately amused themselves by extolling the dietetic perfection of the plum pudding, mince pies and other complements of the season. In an altruistic profession such as ours we suspect nothing but a cheap craze for originality, the *technique* of which consists in taking the accepted view of anything, inverting it and trying to bolster up the inversion. For all that we prefer, and experience is on our side, the old-fashioned idea. For a few days *laissez faire* is our motto—with the "fair." We know it is bad for us, but we do not mind. We may be fools, but we are brave enough to rejoice in our folly; we have the courage of our convictions; if we over-eat ourselves the game is worth the scandal. As human beings let us enjoy ourselves a little while to-day—to-morrow we shall learn that the relations between Christmas and chrismol are more than phonetic. As medical men we may hold that the conventional festivities do no one any real harm, and if we have to contend with a superabundance of minor ills just now, we can always console ourselves with the cheery thought that where there's a pill there's a pay.

Mortality among Negroes.

Even in our own country people are sometimes quite ignorant of their precise age. The negroes of tropical Africa appear to be universally so, since there is no official registration of birth. It is difficult, therefore, to frame accurate mortality statistics in the absence of any definite knowledge as to age. In a recent issue of the *Archiv für Schiffs und Tropen-Hygiene*, Dr. R. Mouchet, of Liège, who has been working for two years at Leopoldville, in the Middle Congo, where he has performed more than one hundred *post-mortem* examinations of natives, asserts that the native dies far younger than the European. His reasons are interesting. In the first place, a grey-haired native is rare, nor is obesity often seen. Cataract, tumours, atheroma, and kidney disease are hardly ever found, and ossification of the costal cartilages is exceptional. Further, a native generally dies from a single uncomplicated disease, and when his body is examined *post mortem* there are frequently no associated lesions found accompanying the effective cause of death; they have not had time to develop. The negro has a lesser vital resistance than the European, and this whether for a disease new to him, as tuberculosis, or for tropical diseases against which his race has struggled for generations. Dr. Mouchet ascribes this feeble resistance to poor food, bad housing, and intestinal parasites. In 127 bodies examined, ankylostoma occurred in 114; only seven were quite free from intestinal parasites. Then, too, the native dies very often from amœbic dysentery, or from the perforations it causes, rarely living till a liver abscess has time to form; while the European survives the first onset of the disease, and if he succumbs later it is due to the abscess. Tuberculosis is the chief cause of death, and gave occasion for 37 in 100 necropsies. Smallpox has almost disappeared, thanks to vaccination; and in the same district trypanosomiasis has been overcome, for there are now no longer any *glossinæ*.

Actinomycosis in Imported Ox-Tongues.

An interesting report has recently been issued by the Medical Officers of Health for the City and Port of London, Dr. W. J. Howarth and Dr. Herbert Williams, upon the result of a careful examination of a large number of tongues imported from Argentina. Information had been received on July 31st last from the Local Government Board that tuberculous and actinomycotic lesions had been observed among certain tongues, and as a consequence 85,445 tongues were examined. Of these, 4,949, or 5.8 per cent., were rejected an account of showing lesions which were practically all those of actinomycosis. The disease was identified by smears and sections, and was found to affect the blade of the tongues or to be localised in the glands, the latter situation predominating. Every tongue required to be defrosted before examination, so that the difficulties of the investigation were not inconsiderable. The frequency of the lesion in the glands indicates the necessity for importers ensuring that the glands are left attached to the tongue, and not removed, as was the case in a percentage of tongues examined in certain consignments. The report concludes that, until action is taken in the Argentine which will ensure that these tongues are carefuly examined, and all those presenting lesions are withdrawn, it will be necessary for the sanitary staff to continue the present arrangement of examining every tongue received at the Port and City of London. It is recommended that regulations should be framed rendering the importation of tongues without the root and glands attached liable to re-exportation. Drs. Howarth and Williams and their staff may be congratulated upon the promptness and energy they have shown in bringing to the notice of the authorities a matter affecting so strongly the vital interests of the public, and it is to be hoped that their recommendations may be acted upon with as little delay as possible.

PERSONAL.

Miss Eleanor Davies-Colley, F.R.C.S.Eng., has been reappointed Surgical Registrar to the Royal Free Hospital.

Fleet-Surgeon C. I. Mansfield, M.V.O., has been promoted to the rank of Deputy Surgeon-General in His Majesty's Fleet.

Dr. E. Colston Williams has been appointed Medical Officer of Health and School Medical Officer for the County of Brecon.

Dr. Sidney John Cole, M.A., M.D., B.Ch.Oxon., has been appointed Medical Superintendent of the Wiltshire County Asylum.

Professor Dr. Ernest Ehlers, of Göttingen, has been elected a corresponding member of the Zoological Society of London.

Dr. J. Le Fleming C. Burrow, M.B., Ch.B.Edin., M.R.C.P.Lond., has been appointed Honorary Physician to the Leeds Public Dispensary.

Dr. William Carnegie Brown, M.D., C.M., joint secretary of the Society of Tropical Medicine and Hygiene, left estate of the gross value of £49,886, of which £44,225 is net personalty.

Capt. R. Kelsall, Indian Medical Service, has obtained the Gold Medal of the University of London in Branch 6 (Tropical Medicine) for the M.D., at the London School of Tropical Medicine.

Dr. Andrew Love, Physician Superintendent of the Greenock and District Combination Hospital at Gateside, Greenock, has been appointed Tuberculosis Officer and Medical Superintendent of the Lanarkshire Burghs Sanatorium.

Dr. Leonard Guthrie will deliver his presidential address before the Harveian Society of London, on "The Early Transactions of the Harveian Society," on January 8th, 1914, at the Stafford Rooms, Tichborne Street, Edgware Road, W.

We regret to learn that Dr. Thomas W. Mason, of Tooting, met with a serious accident on Sunday night, when his motor car collided with another, with the result that of two friends riding with him one was killed and the other seriously injured. Dr. Mason himself is suffering from concussion and shock.

The Rev. S. Scobell Lessey, M.D., Chaplain Superintendent of Abbotswood House. Temple Memorial Home for Male Inebriates, will open a discussion on the Male Inebriate at a meeting of the Society for the Study of Inebriety, to be held on January 13th, 1914, at 4 p.m., at 11 Chandos Street, Cavendish Square, W.

Dr. William Bower, who has recently retired from Hendon on the ground of ill-health, was the recipient the other day of a handsome testimonial, which took the form of a beautiful grandfather clock in a mahogany case with two sets of chimes, from his grateful patients in token of their appreciation of his services rendered during his eighteen years' residence in the district.

CLINICAL LECTURE

ON

PYREXIA—COUGHS—IN CHILDREN.

By SHEFFIELD NEAVE, B.A.Oxon., M.R.C.P.Lond.,

Late Physician to the Queen's Hospital for Children, London.

PYREXIA.

THE ætiology of Pyrexia when unaccompanied by other signs is often difficult to elucidate, though its proximate cause is of course some disturbance acting on the heat centre.

The nervous system of children as opposed to adults is easily provoked to pathological action and it is from this cause, too, that we find a greater irregularity in them of such functions as the pulse, the respiration and the action of the sphincters, so that we can hardly expect the thermic system to escape, and as a fact, on the contrary, it is very easily disturbed. It can be shown that after birth the nervous system of a normal human being has gradually to acquire the stability and the co-ordination of maturity during the first twelve years of life or so.

The nervous system also in children is very variable in its behaviour in different cases, and what one may expect in this way in one family is quite different from that in another; in fact, children are by no means always made in the same mould and have many idiosyncrasies in their development.

On one occasion I found two children of the same family constantly having rises of temperature which were never accounted for, and this extending over a period of some years. Another in the same family had a similar history. Again in the wards of a children's hospital it is quite common to be unable to account for a rise of temperature perhaps extending over several days so that it has even been thought that any general excitement such as a violent fit of crying or of a joyous character may be sufficient cause in a case where the system lacks normal resistance at the moment.

When one is called to a case of pyrexia without further symptoms one should be prepared with some habitual line of thought in order to do justice to the case.

The general maxim that one should always take enough time to thoroughly examine every case if one does not mean to be caught napping is very important here. Such a thing is obviously not always possible in all kinds of practice, but the neglect of it is the cause of most errors made, so much so that a great deal of the work of a consulting physician consists in pointing out things quite easy to discover if a complete examination had been made.

One of the first things is to search for a collection of pus in any part of the body, but we are here dealing with things medical as opposed to things surgical so we will leave this and run through the more common ailments in which a somewhat prolonged pyrexia may be the only sign at the commencement. Omitting the specific fevers of childhood such as measles and scarlet fever, we will consider the following more common diseases which may bring about pyrexia without an obvious cause at the onset.

(1) Acute tuberculosis.
(2) Rheumatic fever.
(3) Enteric fever.
(4) Constipation.
(5) Bacilluria.
(6) A less common group, viz., Middle ear disease, Hodgkin's disease, Leucæmia, Syphilis.

(1) In children, acute tuberculosis usually is an exacerbation of a more chronic state of which there are probably some signs, but there are cases where it becomes generalised from some internal focus that cannot be diagnosed. While this is going on it is more of a blood infection than is usual in adults, especially in smaller children, and this state may well account for such a temperature without other signs. Again an internal focus, without being actually in the process of dissemination, may of course account for a raised temperature.

The nature of the *pyrexia* such as its remission in the daytime and exacerbation in the evening, together with night sweats if present, will assist us, and if later tubercle of the choroid can be seen the diagnosis is complete. Von Pirquet's reaction may be of some value for the purpose of diagnosis, though not so much so in older children (an injection of old tuberculin would be more reliable, but cannot be well used while the temperature is raised), thus it may be some time before the practitioner is in a position to make up his mind as to diagnosis.

It is not of uncommon occurrence, as we have seen when discussing wasting, to find at a *post-mortem* examination the lungs, spleen and other organs studded with miliary tubercle, none of which are open, and which, in the absence of signs, have never been diagnosed in life. It is easy to see that such a state of things may often produce pyrexia without other symptoms or signs in its first stages.

(2) Rheumatic fever may also be the origin of the difficulty, for in a child of that diathesis an aborting attack may give but little or no other sign. Consequently it is of importance to ascertain the personal and family history in the respect of this complaint, and to note any tendency to inflammation of the throat structures, and the tonsils in particular, any question of joint or limb pains, as well as hyperhydrosis. An exhaustive examination of the heart is of course indispensable, as this is the most vulnerable point here in children. All this should be done for the purpose of finding some confirmatory fact. On this head, too, it is as well to mention the necessity of diagnosing osteomyelitis from rheumatic fever, but the pain is usually sufficiently early in the disease to give the clue to which is the cause of the pyrexia.

(3) Enteric fever is very atypical in children, and is one of the most difficult things to exclude in these cases, as without regular signs and symptoms we have only Widal's test or a blood culture

to fall back upon; the former is only available after the seventh day, and the latter may not be positive, at any rate on the first experiment, so that in both cases much time may elapse. A prolonged temperature not otherwise accounted for in other ways should always raise suspicion in one's mind as to this disease.

The following case will illustrate the difficulties that may arise. A case was diagnosed as tubercular hip disease and died suddenly. It was shown at the *post-mortem* examination that although there was pus in the hip joint, this contained the typhoid bacillus, and that the child had died of perforation of the bowel. Except the pain in the hip joint and the temperature there had been no other symptoms.

(4) Another cause of simple pyrexia is constipation, and unless it be excluded frequent mistakes will be made. This appears at first sight to be a simple matter, but there are pitfalls. Thus it has often been pointed out that a daily motion of the bowels may occur, notwithstanding there are retained fæces, and it is probable that while these remain in some of the folds of the bowel the fæces of daily production slip by. This state of things may easily lead to the mother stating that she has no difficulty with the child's bowels, and that he has a good motion daily. In a doubtful case of pyrexia, therefore, the abdomen should be carefully palpated for accumulations in the bowel, especially in the sigmoid flexure, and an enema or an aperient given. It is surprising how many of these cases clear up under this simple treatment. The grandiloquent names of " Intestinal stasis and intestinal toxæmia," probably include some of these cases, a good many of which at the hands of an eminent surgeon have undergone excision of the colon. Still mentions a case of recurring pyrexia which had been treated for influenza, pneumonia, peritonitis and typhoid, and appeared to get well quickest by administering small doses of calomel.

In connection with the above, helminthiasis should be thought of and excluded.

(5) *Bacilluria.*—Another solution of the riddle may not unfrequently be obtained by an examination of the urine for organisms. The commonest is probably Bac. coli com. which is said often to make its way into the urino-genitary system through the walls of the pelvis of the kidney from the intestine or blood, as well as by the external orifice of the urethra. When this is the case a simple pyrexia is often the only sign, and the child will perhaps seem but little out of sorts. It is not easy to get rid of the bacillus from the genito-urinary system, which might be well expected if it has actually invaded the kidney, but a vaccine often relieves the symptoms quite promptly.

(6) The onset of meningitis is often insidious, and pyrexia may be the first sign to arrive, especially when it is of the tubercular variety, seeing that tubercular meningitis is usually the result of the disease when generalised. Meningitis should therefore not be forgotten, and the various signs announcing its advent looked for, thus a desire to be left alone, photophobia, and the cephalic cry, or any of them, are matters of great importance. In the tubercular variety the temperature is seldom really high, rarely above 101, and in the basal meningitis even if high, it will usually at times remit completely.

There remain two or three affections which I think should not be left unmentioned, notwithstanding that they are less frequently a cause of prolonged simple pyrexia at the onset. I refer to middle ear disease, Hodgkin's disease, leucæmia and syphilis.

(1) Otitis media usually declares itself in other ways than by mere pyrexia, but there are cases where the pain is too slight to be discovered by those about the child, and where the disease is essentially chronic for the time, being only thus manifested. Hence a careful investigation of the ears is absolutely necessary for the exclusion of this, and even so the practitioner may be left in uncertainty.

(2) Hodgkin's disease usually commences by the enlargement of the glands on one side of the neck. As the causes of gland enlargement are so numerous it is often difficult to positively exclude it as a cause of pyrexia in its early commencement, however unlikely one may think it. The temperature is often intermittent, and the blood count at first at any rate is rarely affected.

(3) If leucæmia is suspected as the cause, a blood count here is much more likely to be of use, and enquiries should also be prosecuted as to enlarged glands, as well as enlarged abdomen and shortness of breath.

(4) Congenital syphilis, though usually manifested in other ways, may be more rarely a cause of simple pyrexia. If it is suspected the Wassermann test should be tried and if positive, the appropriate remedies will usually be successful in bringing the temperature to the normal.

COUGH.

Coughs in children are more diverse in their causation than in adults, as the state of their nervous system produces less stable co-ordination.

Diagnosis therefore at times is by no means easy in respect of ætiology.

A cough is produced by some reflex stimulus of the vagus, which incites the organism to make a sudden expiratory effort, as if in the act of trying to eject something from below the larynx, by bursting open the closed glottis. This effort is often successful when this something exists, as in the case of mucus in the bronchial tubes.

On the other hand there may be nothing to expectorate and the real source of irritation may be found elsewhere, *e.g.*, the area of the pharyngeal branch in the naso-pharynx and fauces, and it is thought by some that this cause is the more frequent in children. Other branches of the vagus, too, may also be responsible for this reflex stimulus.

It is proposed here to deal chiefly with this class of case, viz., coughs which are not due to a pathological state of the lung, at any rate in the first place.

In diagnosis as to whether a cough is due to lung affection or not, the rate of respiration will be of much assistance, as these local irritations are not likely to increase it.

Some useful generalisations can be made and a good deal gathered from the nature and characteristics of the sound produced and from its immediate effects such as vomiting.

We may therefore be permitted to divide coughs into those which are spasmodic and those that are not so, and the non-spasmodic into harsh, dry coughs and those that can be heard to be producing expectoration.

(*a*) Spasmodic.
(*b*) Non-spasmodic.
  I. Harsh and dry.
  II. Expectorative.

(*a*) The cough of pertussis is the definitely spasmodic, and it may be taken as a type of this class *par excellence*. Every one knows the characteristics of this cough; the sudden paroxysmal violence, the protruded tongue, the swelled face, and often the resulting vomit, and although all these may not always be present, yet to an ear that has heard it only a few times, the general effect is easily recognisable, so that this disease may often be discovered thereby even without a whoop.

At the same time there are other causes which produce something of the same result, of which the following are instances:—

(1) Bronchial glands enlarged.
(2) Long uvula and adenoids.
(3) Bronchiectasis.
(4) Fibrous lung.
(5) Foreign body.

(1) *Enlarged Bronchial and Mediastinal Glands* pressing on the trachea and bronchi are often responsible for spasmodic cough, and one has to be on one's guard in the matter. In fact, considering how often tubercle of the lung follows pertussis, how often the cough of pertussis persists for even months after the attack without the whoop (but with the other characteristics), and how often tubercle commences in the bronchial glands, it is quite possible that these glands are tuberculous and responsible owing to their pressure effects, and therefore such a persisting cough must be looked upon with grave suspicion.

(2) *Night Cough* is often due to adenoids or long uvula. Here the child may wake up in the middle of the night and undergo a violent choking fit of coughing, often accompanied by a night terror, the two together causing much alarm to the parents. This is usually owing to the mouth being wide open during sleep and causing the pharynx to be much irritated owing to the resulting dryness. The mother is apt to send for the doctor in the middle of the night in much anxiety thinking the child is undergoing what she calls a convulsion, but by the time he arrives all is again quiet. When the uvula is shortened or the adenoids removed the cough ceases. Enlarged tonsils will, of course, aggravate the above state of things. The above is a common cause of night cough.

(3) *Bronchiectasis*, too, accounts for a violent spasmodic fit until the contents of the cavity have been expectorated. It is of assistance to arrange that the child leans out of bed with his head lower than his pelvis and coughs into a vessel on the floor (if he can be induced not to swallow his sputum), the force of gravity being thus called into action, usually with satisfactory result. This cough commonly takes place in the morning on the child waking up after a period of sleep during which the cavity fills up.

(4) *Fibroid Lung* without cavity is also said to produce this kind of cough, but it is more probably due to dilated bronchi in some form or another also. The dilatation may well be cylindrical as opposed to the saccular form in bronchiectasis.

(5) Lastly, a *Foreign Body* in the air passages often causes a spasmodic cough, and this may be the only sign of its existence there. It may be therefore that the well-known trouble of ascertaining whether a foreign body has been swallowed or not will have to be undertaken.

(*b*) As to non-spasmodic cough, most of those caused by reflex actions due to nerve irritation in parts other than the lung, are usually dry, harsh and worrying to a greater or less degree. It must, however, be remembered that a cough may start in this way and yet may eventually produce some expectoration owing to the irritation of, and the increased secretion by the bronchi (induced by the mere action of coughing) which will reduce the harshness and dryness of the sound.

(1) Thus the cough attributed to the difficult eruption of the teeth is often accompanied by bronchial secretion of mucus, or, as some put it, the eruption of the teeth is a cause of bronchitis. Tooth irritation, however, is not admitted by all to be directly a cause, but it is asserted to be due to a true coincident bronchitis. It would, however, appear that this cough often subsides with the eruption of a tooth, having given needless anxiety.

(2) The hysterical cough is usually described as a sort of bark, which word best describes the sound in general. It is often accompanied by some definite muscular act or trick. I once saw a case where before the cough the child, a girl, æt. 11 years, smacked her tongue twice against the roof of her mouth. In these instances both the cough and the trick have to be cured by the will of the patient regaining sufficient control over the muscles involved. I cured this patient by telling her to close the lips tightly and blow against them when she felt the fit coming on. This stopped the tongue trick, and the cough, too, did not follow.

(3) A cough may often follow a specific fever such as measles or influenza, during the convalescence, and it is accounted for usually by talking of general debility. Probably it is due to a hyper-sensibility of the respiratory mucus membranes following the hyperæmia induced during the disease.

(4) Intestinal irritation from helminthic and other troubles is said to cause cough. It is not clear that this is the case. Gastric indigestion is more likely to be a cause, and cough is certainly caused by the more nearly physiological acts, such as commencing to vomit, or mere regurgitation in breast-fed babies.

(5) Irritation in the ear is also a probable cause, so that even hardened wax in the external meatus is said to be sufficient for the production of a cough.

(6) The cough of circulation troubles is well known, as in the case of mitral regurgitation or of pressure as in the case of mediastinal tumours.

(7) Dust or a smoky nursery have also been not unfrequently the cause of difficulty of diagnosis. This cough is commonest in particularly irritable mucous membranes, and this point should not be forgotten in all coughs: that the idiosyncrasies in degrees of irritability are very marked. What will produce a violent cough with streaming eyes, injected cheeks and great discomfort in one has no visible effect on another in the same nursery. The smoke of the fire when lighted in the morning may produce a cough for the rest of the day in one or two of a large family.

In conclusion, the mind of the practitioner in approaching this question should always begin by considering whether the cough is doing useful work, such as the removal of mucus from the lung or the expansion of it due to the effort and breathlessness involved. It should, on the other hand, be remembered that the irritation and violence of it may be out of all proportion to good work done. The latter is nearly always the case in those instances where the cough is not originated by the lung which we have been considering, and therefore there is more reason to treat them with sedatives, pending a removal of the cause.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Dr. Joseph Hollós, Szeged, Hungary. Subject: "Tuberculosis as a Cause of Menstrual Disturbances."*

ORIGINAL PAPERS.

THE PATHOLOGY OF THE VARIOUS ACUTE INFLAMMATIONS OF THE THROAT AND NECK, INCLUDING ACUTE ŒDEMA, PHLEGMON, ERYSIPELAS, AND ANGINA LUDOVICI, BUT EXCLUDING DIPHTHERIA. (a)

By PHILIP R. W. DE SANTI, F.R.C.S.ENG.,
Surgeon in Charge of Throat, Nose, and Ear Department, Westminster Hospital.

Summary.

THE paper is based on a report of four cases of acute septic inflammation of the throat with bacteriological examination, read before the Royal Medico-Chirurgical Society of London in 1903. This communication was a sequel to a paper read by Sir Felix Semon before the same society in 1895 on "The probable pathological identity of the various forms of acute septic inflammations of the throat and neck, hitherto described as acute œdema of the larynx, œdematous laryngitis, erysipelas of the pharynx and larynx, phlegmon of the pharynx and larynx, and angina Ludovici."

In addition, details are given of four more such cases, making in all eight cases.

The eight cases are:

1. Erysipelas of the pharynx.
2. Acute septic œdema of tonsils and pharynx.
3. Acute gangrenous inflammation of the throat.
4. Acute pharyngitis due to streptococcus pyogenes followed by septicæmia, deep glandular inflammation and pericarditis.
5. Acute suppurative inflammation of the larynx.
6. Acute œdematous septic laryngitis.
7. Acute septic inflammation of tonsils and pharynx.
8. Acute septic inflammation of pharynx, tonsils, and buccal mucous membrane, with inflammation of submaxillary cellular tissue.

All the cases were adults with one exception, a boy aged 12. All were of the male sex, in the prime of life and previously healthy. Five were hospital and three private cases. In all the streptococcus predominated in cover-glass preparations and on cultivation; six out of the eight cases were treated with some form of anti-streptococcus serum. One case had as well an autogenous vaccine. In one case the subsequent history is unknown, as the patient refused admission to the hospital. In one case serum and vaccine treatment was refused but the patient recovered. The six cases treated all made good recoveries, as also the one who refused serum treatment. The history, clinical symptoms, the course of the disease, and more particularly the bacteriological examination of this series of cases indicate their pathological identity and point to the conclusion that each case should be considered as showing merely a varying degree of virulence of one and the same pathological process. The micro-organism chiefly present as the causative factor is the streptococcus pyogenes group. Other organisms may be and are found: not infrequently more than one organism is present. There is, however, no one specific organism for any one of these various inflammations.

The different localisation of these septic inflammations depends on the resisting powers of the parts attacked, an accidental breach of surface or a pre-existing condition of catarrh rendering the part more susceptible to infection. The main points in treatment of these inflammations are early recognition, and the question of serum or vaccine treatment. A serum should be given early and of a type most nearly approaching the autogenous variety. Following the use of a serum or in combination with it (sensitised vaccine) an autogenous vaccine should be given as soon as prepared.

Under this title is included a number of forms of acute septic inflammations of the pharynx, larynx, and cellular tissue of the neck (angina Ludovici) which up to quite recently had been looked upon as pathologically and clinically different diseases: even to the present day confusion exists and most textbooks still describe "inflammatory œdema," "phlegmon," "gangrene and erysipelas," etc., of the pharynx and larynx as separate diseases.

In April, 1895, Sir F. Semon read a paper at the Royal Medico-Chirurgical Society of London on "The probable pathological identity of the various forms of acute septic inflammations of the throat and neck, hitherto described as acute œdema of the larynx, œdematous laryngitis, erysipelas of the pharynx and larynx, phlegmon of the pharynx and larynx, and angina Ludovici," and advanced the view mainly on clinical grounds that these various forms of acute septic inflammations of the throat and neck should be looked upon as varying degrees of virulence of one and the same pathological process, the primary seat and subsequent development depending in all probability on accidental breaches of the protective surfaces through which the pathogenic micro-organism causing the subsequent events found an entrance.

In February, 1903, I read before the same society a paper on "Four cases of acute septic inflammation of the throat with bacteriological examination of each," as a sequel to Sir Felix Semon's communication, and advanced proofs clinically and bacteriologically confirming Sir F. Semon's conclusions. Since reading my paper I have had experience of a few more cases, and as to-day's communication is based on these cases, I shall forthwith give as briefly as possible notes of each.

CASE I. *Erysipelas of the pharynx.*

Male, aged 48, deep-seated cervical abscess, right side of neck, due to a Bezold's perforation of mastoid; abscess in neck opened and radical mastoid operation performed. Some three weeks later during convalescence the temperature rose to 102.4, and cutaneous erysipelas was noted on the left cheek; this spread to the whole of the left side of the neck and face, then across the mid-line to the face and neck on the right side; there were patches of redness also all over the back extending to the lumbar region. Soreness of the throat was complained of and a swollen bright red condition noted of the post-pharyngeal wall and whole of soft palate and uvula.

Cultures from the throat showed mainly streptococci pyogenes with some staphylococci.

10 c.c. of a polyvalent anti-streptococcal serum was injected into the abdominal wall, followed by a second and a third injection on succeeding days. Reaction occurred at once, and shortly after the last injection all rash had gone and the throat was normal.

CASE II. *Acute œdematous tonsillitis and pharyngitis.*

Male, aged 32, history of three days' illness, *i.e.* headache, shivering, sickness, and for twenty-four hours pain and dryness of throat increasing rapidly.

Patient looked ill, voice a whisper, temperature 104.6, pulse rapid, 120, enlarged and tender glands both sides of neck. Some albumen in urine

Throat: intense redness and œdematous swelling of right tonsil, soft palate and uvula; dark red glazed and swollen condition of post-pharyngeal wall; slight œdema of the epiglottis.

Swab cultures from the tonsil and pharynx showed streptococcus pyogenes in numberless chains. The patient refused admission to the hospital and the further history is unknown.

(a) Independent paper read at the Section of Rhino-Laryngology, International Congress of Medicine, London, August, 1913.

CASE III. *Acute gangrenous inflammation of the throat.*

Male, æt. 21, sore throat, pain and difficulty in swallowing, loss of voice, and headache of two days' duration and rapidly getting worse. Previously very healthy. Temperature 101.2, pulse rapid and soft. Uvula much swollen, intensely red above, but lower half quite black and gangrenous. Soft palate red and œdematous and tonsils slightly so. Epiglottis slightly swollen. Extensive œdema of left aryepiglottic fold.

On admission patient could not swallow at all. Swab cultures from the uvula and pharynx revealed streptococci pyogenes, some staphylococci, no diphtheria bacilli.

At once 20 c.c. of anti-streptococcal serum was injected into right lumbar region, and pure carbolic acid rubbed carefully into the gangrenous uvula.

Five hours later the patient could swallow. Three days later the patient was rapidly recovering, and from then an uninterrupted recovery ensued. Only the one dose of serum was injected, as the improvement following was so very marked.

CASE IV. *Acute pharyngitis due to streptococcus pyogenes followed by septicæmia, deep glandular inflammation and pericarditis.*

Male æt. 21, first taken ill with sore throat and swelling in neck October 16th, got worse and was admitted into hospital October 24th, partly unconscious and almost moribund. Temperature 101.4, pulse 120, low tension, severe precordial pain. Tongue swollen and brown, posterior pharyngeal wall very swollen, darkish brown and some sticky mucus. Mouth difficult to open; large brawny red swelling left side of neck.

Auscultation: loud pericardial friction rub. The swelling in neck had been incised but only a little sanious fluid escaped. Mucus from throat and discharge from cervical wound showed mainly in coverglass specimens, and upon cultivation, streptococci pyogenes. A yeast, staphylococci albus, and a few bacilli were also found on cultivation of the mucus from the throat.

10 c.c. of anti-streptococcal serum injected at 9.30 p.m., at 8 a.m., and 4.20 p.m., next day, and a fourth dose on the following day. Patient began to rally at once although not expected to live through the night and made an excellent recovery.

CASE V. *Acute suppurative inflammation of the larynx.*

Male, æt. 47, a private patient in previously excellent health. Sudden onset with chill, malaise and intense pain in the throat: temperature 102.4, pulse 110, soft; within 24 hours of onset difficulty in breathing and swallowing.

When I saw the patient 48 hours after the first onset of disease, I found him very ill with dyspnœa, constant bad cough, and bringing up a lot of mucus and pus; the temperature was 102.6, the patient was cyanosed; pulse rapid and small, anxious look. The pharynx was slightly congested; examination of the larynx showed very considerable acute œdema of the arytenoids, inter-arytenoid space and aryepiglottic folds and all the larynx was more or less bathed in pus. No tenderness of larynx externally.

20 c.c. of polyvalent anti-streptococcal serum injected at once and preparations made for emergency tracheotomy. Within 12 hours there was a marked change for the better; temperature 100.8; muco-pus diminishing and breathing easier; patient made a rapid recovery. The pus from the larynx on cultivation showed pure streptococcus longus.

CASE VI. *Acute œdematous septic laryngitis in a boy of 12.*

Patient was a boarder at a large private school. There had been one case of diphtheria in the school seven weeks previously. The illness began with headache, lassitude, sickness, and some sore throat and a temperature of 101.3.

Patient was isolated, and swabs taken from the throat and nose; no diphtheria bacilli were found, but staphylococci and streptococci were present. Twenty-four hours later patient was much worse, the throat trouble being laryngeal.

I saw the patient late in the evening and found very embarrassed breathing, recession of chest and mucopurulent matter being coughed up.

Examination showed nil in pharynx, but considerable œdema and redness of the epiglottis and posterior region of the larynx; the swollen parts were covered with pus, no sign anywhere of membrane. Temperature 102.6; anxious appearance; sweating; rapid pulse. 10 c.c. of polyvalent anti-streptococcal serum injected into buttock; patient easier 6 hours later, and temperature 101.4; a second injection given 12 hours after the first; good recovery.

CASE VII. *Case of acute septic tonsillitis and pharyngitis.*

Male, æt. 32, private patient, illness taken to be an ordinary double quinsy; three days after commencement of attack patient seemed very ill and general condition getting worse. I saw him in consultation and found intense sloughy suppurative inflammation of left tonsil and œdematous swelling of post-pharyngeal wall and opposite tonsil; temperature 101.4; painful deglutition; anxious look; trace of albumen in urine, ordinary remedies had had no effect.

I advised immediate injection of anti-streptococcal serum to be followed by an autogenous vaccine, but patient refused this line of treatment. He was treated with large doses of perchloride of iron, and although his convalescence was protracted he got quite well.

Cultures from pus over left tonsil revealed almost pure streptococcus longus.

CASE VIII. *Acute septic inflammation of pharynx, tonsils, and buccal mucous membrane, with inflammation of submaxillary cellular tissue.*

The patient was a chef and a drinker. When seen by me he had considerable swelling and œdema of the pharynx and tonsils and buccal mucous membrane on right side; there was an abscess round a carious right upper molar tooth.

The submaxillary region of neck on both sides was swollen, hard, and tender, and the floor of the mouth œdematous and prominent; lower and upper lips much swollen. Temperature 101.6. Patient was admitted into hospital, the tooth seen to, and 20 c.c. of polyvalent anti-streptococcal serum injected. An autogenous vaccine was prepared from cultures taken from the throat, mixed organisms being found. He reacted within a few hours and made a rapid recovery.

The submaxillary inflammation yielding at once to the serum did not require incisions. I was prepared in this case to give citric acid internally if necessary as recommended by Sir A. Wright.

Now, in my opinion, the history, clinical symptoms, the course of the disease, and more particularly the bacteriological examination of my cases, all point decisively to their pathological identity, and to the conclusion that each case should be considered as showing a merely varying degree of virulence of one and the same pathological process.

Since the reading of Semon's paper in 1895, great strides have been made in bacteriological research, and it is mainly on bacteriological grounds that one has to discuss these acute septic inflammations.

It is now universally acknowledged that these infections are due to the invasion of the system by pathogenic organisms, of which at all events in my experience the streptococcus pyogenes group is far the most important and frequent. Other organisms may be and are found, especially the staphylococcus aureus, albus, and citreus, pneumococcus, bacillus coli communis, and micrococcus tenuis, and should any one of these micro-organisms multiply sufficiently, then an acute septic inflammation may be produced which can only be differentiated from a streptococcal inflammation by bacteriological examination. There is, however, no one specific organism for any one of these various inflammations; not infrequently more than one organism is present.

Again, the same organism, especially the streptococcus pyogenes, may produce widely varying results under different circumstances, at one time a local inflammation, in another erysipelas, in another an abscess, cellulitis or a general septicæmia (Marmorek's experiments); this is well exemplified in my series of cases, in all of which the streptococcus predominated, and yet in some cases there was so-called acute phlegmon, in others suppuration, erysipelas, and gangrene.

Formerly streptococcus pyogenes and streptococcus erysipelatis were considered as two different species, but it is now universally agreed that the two organisms are one and the same, erysipelas being produced when the streptococcus pyogenes of a certain standard of virulence gains entrance to the skin lymphatics.

These different effects, then, are attributable partly to differences in virulence and the number of micro-organisms gaining access, partly to the seat of infection and mode of entry into the body, partly to the resistance of the individual, and partly to real differences existing between different races of streptococci. Poynton believes there is another factor, viz., a tendency inherent in micro-organisms to produce special poisons, a specific toxicity which has to be reckoned with in all investigations on the unity of the streptococcal group.

Staphylococci usually and streptococci often can be cultivated from the secretions of the mouth in normal conditions. Fraenkel's pneumococcus and the pneumobacillus of Friedlander have also been found in the mouth and nasal cavity: the entrance of these organisms into the deeper tissues when a surface lesion occurs can easily be understood. The objection urged that the different localisation of these cases spoke against their being identical is wrong. The different localisation of these septic inflammations depends on the resisting powers of the parts attacked, an accidental breach of surface or a pre-existing condition of catarrh rendering the part more susceptible to infection.

As Semon has pointed out, diphtheria remains diphtheria whether it primarily attacks the throat, nose, conjunctiva, or vulva, and it is the same with these acute septic inflammations of the throat.

In my experience Ludwig's angina should be included in this class of case. It is a variety of submaxillary cellulitis, an acute suppurative sometimes gangrenous periglandular inflammation in the region of the submaxillary glands, and the infection usually occurs from a lesion of the oral buccal mucous membrane, from a carious tooth or perhaps inflamed tonsil. It is commonest in males of 20–30.

It is always very sudden and rapid in its course, the swelling at first very hard and brawny, pushing up the tongue and causing protrusion of the submental tissue. It is a particularly dangerous variety and requires very prompt surgical measures in addition to other treatment. I might mention here the use of citric acid internally. In a case seen by Sir A. Wright of Ludwig's angina in which multiple incisions had been made early, the patient 24 hours later was collapsed and delirious: none of the gaping incisions showed any moisture. Film preparations showed abundant streptococci; the blood taken from a vein at the elbow clotted at once. Wright prescribed 60 grs. of citric acid every 3 hours: 6 hours later lymph began to ooze from the wounds and the acid was stopped. Improvement was so rapid that no vaccine was employed and there was complete recovery; other such cases have been recorded.

The citric acid lowers the coagulability of the blood so that lymph containing large amounts of anti-bacterial and anti-tryptic bodies are freely admitted to the infected parts and the organisms thereby destroyed before the formation of pus. *Clinically* in these cases of acute septic inflammation of the throat the following points are noteworthy. That the patients are usually adults, mostly men in the prime of life, in excellent previous health, and frequently as in Semon's cases of the higher social scale. In my cases, however, five were hospital and three private patients of good social standing.

That it is most important to recognise early the nature of the case and whether local or constitutional treatment is the most urgent with regard to treatment. That as Dundas Grant has pointed out, sore throat and general bodily illness, a voice suggesting peritonsillar abscess, but ability to open the mouth, and nothing much to be seen in the throat, are conditions dangerous to life. Finally, the question of serum and vaccine therapy has a considerable bearing on the pathology of these diseases.

In 1903 I advocated strongly the immediate intramuscular injection of 10-20 c.c. of anti-streptococcal serum and pointed out that all my cases had done remarkably well under that treatment. In my subsequent cases I have had equally good results from the same treatment, my cases being mainly at all events of streptococcal origin. The last few years, however, vaccine therapy has come into fashion, and the tendency in these cases is to use an autogenous or still more recently a sensitised vaccine. In only one of my cases was an autogenous vaccine employed, and prior to its use an anti-streptococcal vaccine was used. These streptococcal infections are primarily local, some becoming permanently circumscribed, others giving rise to septic and pyæmic conditions. Ball, in his lecture on "Acute infective processes due to the streptococcus" (*Lancet*, 1912, vol. i), emphasises the following points in regard to serum and vaccine therapy.

That the blood should be examined.

In all cases probably of streptococcal infection a certain number of bacteria do get into the blood-stream though their presence cannot be demonstrated by the usual methods. In others they get the upper hand and can easily be demonstrated in the blood-stream. A streptococcus isolated from the blood is probably more virulent than that got from a local focus and therefore of more use in preparing a vaccine. There being many types of streptococcus an autogenous vaccine is of more use than a stock vaccine. That the object of *serum* therapy is to neutralise the toxins produced by bacteria by providing for the human tissues anti-bodies in larger quantities than they themselves possess, and is mostly of use in the early stages of infection. That the object of *vaccine* therapy is to stimulate the human tissues to produce anti-bodies for themselves. That the value of a vaccine on the temperature is shown in favourable cases by its fal to the normal by crisis within 24 to 48 hours after a single inoculation; in other cases with a second or third inoculation. That in approaching a case of infection due to the streptococcus:

(*a*) The clinical diagnosis should be accurate to the smallest detail, both as regards local and general symptoms, and the help of the bacteriologist sought in all cases.

(*b*) The lesion if necessary should be dealt with surgically and the necessity for use of artificial methods of stimulation of the machinery of resistance be then discussed.

(*c*) A serum should be given as early as possible and a type used that most nearly approaches the autogenous variety. Following the use of the serum or in combination with it (sensitised vaccine) inject an autogenous vaccine as soon as prepared.

(*d*) Dosage: no absolute rule. If seen very early the general condition being good and the focus of infection circumscribed, a relatively large dose of vaccine may be given, otherwise a small dose is indicated as an initial inoculation. If no effect is produced by the smaller dose gradually increase it until such a result is reached which will produce the desired reaction. If a harmful effect follows, a smaller dose is indicated or even vaccine therapy be contra-indicated.

NOTES ON

A CASE OF POLYARTICULAR RHEUMATISM TREATED BY RHEUMATISM PHYLACOGEN.

By W. ROSSELL JUDD, M.R.C.S., L.R.C.P.,
Ashton-under-Lyne.

The practitioner who has closely followed the many interesting papers published upon rheumatoid arthritis during the past decade must have been more than perplexed by the diverse opinions as to its origin, pathology, and treatment—opinions freely expressed by the highest authorities in the medical profession—so that as hypothesis followed hypothesis in each instance the position felt was that *se non è vero è ben trovato*.

For years we felt very comfortable in assuring our patients that an excess of uric acid was the *bête noir* of their affliction, but now confusion is confounded by an imperfect nomenclature and a war between defective metabolism and the products of microbic toxins. The general practitioner whose time is limited for independent investigation has therefore to follow the light shed by the many scientific lanterns in vogue.

The rapid changes which my patient underwent for the better during three weeks of phylacogen treatment form my excuse for publishing the subjoined notes, especially since for the past seven years she has undergone each treatment for the moment in fashion.

Mrs. H. A., æt. 36, married, four children. With the exception of an attack of pneumonia when 20 years of age, patient enjoyed good health up to seven years ago, when rheumatism set in in the left hip-joint; subsequently the right hip-joint was affected, then all the large joints of the body, and 3½ years ago the meta-tarsal, meta-carpal and phalangeal joints also became involved. For the past 3½ years the patient has been quite unable to get about, has lain in bed unable to feed herself, and having to be turned over when a change of position was felt to be necessary.

During the past seven years she has been under my care, and during this period she has swallowed enormous quantities of salicylates, iodides and guaiacol carbonate, whilst, also, free use has been made of oral and vaginal antiseptics, massage and electricity. Twice she has been to Buxton, and there obtained some slight, but temporary, relief.

Condition prior to treatment.—The patient lay in bed in a helpless condition, very anæmic and emaciated, with all her joints much enlarged, likewise rigid, the forearm flexed (semi-) on arm, legs extended (patient unable to flex them), and the lumbo-sacral joint rigid (unable to flex trunk on legs). Cardiovascular system revealed a soft systolic murmur at the apex. Blood vessels slightly thickened, blood pressure slightly above the normal, urine contains a slight quantity of albumin.

The first injection of rheumatism phylacogen (2 c.c.) was given over the right deltoid on July 23rd, at 1 p.m. Four hours afterwards reaction began, and six hours after the injection the patient was flushed, temperature was 102° F., respiration was rapid (34), there was dyspnœa, a burning at the seat of injection, alternate hot and cold sensations accompanied by nausea.

Daily injections were given, the dose being increased by 1 c.c. each time, and the seat of injection was varied, though selected as near as possible to the affected joints. After the maximum dose of 10 c.c. had been reached, six further injections of that amount were given.

Progress of injections.

After the third injection the pain became less, so that the patient was able to sleep; subsequently it ceased altogether, and it has not reappeared up to the present.

After the fifth injection an erythematous rash broke out within twelve hours; it practically covered the body, but it had disappeared by the next day.

After the sixth injection the patient could extend her arm and made very good attempts at sitting up in bed (without pain).

After the seventh injection she could move her legs, flex knee-joints, move the arms freely and could feed herself.

After the eighth injection (first maximum dose of 10 c.c.) the reaction was very severe—why this should have been so I cannot explain, since one would have thought that by this time the tissues were becoming accustomed to the phylacogen. To a certain extent the cause may have been psychical, since I informed the patient that she was having a large dose. The patient was very hot and restless, with a temperature of 104.6°, she was somewhat delirious, but could easily be roused from this condition, respiration was 44, with dyspnœa, pulse was 120. On the next day the patient felt exhausted, but her temperature was normal, and thereafter she gradually improved.

Comments.

This is, perhaps, one of the worst conditions on which to try this treatment, for the best results are obtained in acute and subacute cases; in fact the ultimate result in the latter is almost magical. I had made up my mind that if reactions failed to appear after the third injection I should abandon the treatment; fortunately a slight reaction was evident from the very first, and this induced me to continue. Nearly five months have elapsed since the last dose of phylacogen was injected; the patient is free from pain, sleeps well, has increased in weight, and can walk slowly.

SOME EXPERIMENTS ON REVIVIFICATION.

By ANGELO DE DOMINICIS, M.D.

My experiments based upon drowning in oxygenated water (hydrogen peroxide) have proved that animals can show vital signs for a time as much as three times longer than they can do in ordinary water. Taking into account the fact that the extension of time applied not only to the period of terminal respiration, but also to that of special asphyxia, I assumed that they could withstand the lack of oxygen for a corresponding period in connection with the determination of the asphyctic phenomenology.

Further experiments accomplished on newly born animals (kittens), whose remarkable resistance to asphyxia is well known, have given concordant results, and in fact it has been possible to observe vital manifestations extending over three hours.

Seeing that the penetration into the circulation of the oxygenated water (hydrogen peroxide) so plainly protracted life, we wondered whether an endotracheal injection could eventually show an influence also on the return of the vital manifestations, more especially when it is performed immediately after the stopping of the respiration.

In every way, on well-known physiological grounds, the injections of oxygen have been advocated, and among the more recent means of effecting it, I will recall the subcutaneous and the intravenous injections in the instance of intoxication by carbon monoxide; but it is obviously only the endotracheal method by which pulmonary absorption in certain conditions, and acting through the smaller circulation, can effect a greater and sufficient action on the general circulation.

Besides, one need not fear, as my experiments on rabbits and guinea-pigs have shown, near or remote inconveniences deriving from this way of introduction, which is not new, but certainly less used.

We use the Perhydrol (Merk) 1 : 10—that is to say, a solution at 1½% in the quantity of about one cubic centimetre per kilo, and even in larger quantities in small animals.

Among the positive experiments that I can show now, I wish to call attention to those accomplished on rabbits and on guinea-pigs, in rapid intoxication by carbon monoxide through illuminating gas.

After the corneal insensibility, the pupillary dilatation, the general relaxation, and the complete stoppage of respiratory terminal movements, while

---

(a) Paper read at the Section of Forensic Medicine at the International Congress in London, August, 1913.

the heart still pulsates, however, the injection of oxygenated water (hydrogen peroxide) into the trachea, accomplished with the utmost rapidity, is followed by thorax compressions (to facilitate the diffusion of the liquid into the lungs) and afterwards also by the lowering of the head to favour the flow of the arterialised blood into the nervous centres.

My experiments do not show, however, that these manœuvres may be usefully protracted for more than half an hour.

When the operation has been made very quickly and the experiment has been successful, one can assist the return of the respiration, first in the form of deep and infrequent respirations, and then as dyspnœa. The animals soon recover, however, without any subsequent ill effects appearing from the operation.

Undoubtedly numerous objections can be raised to these researches. By the thorax compressions there come into action artificial respiration and the mechanical stimulation of the heart, and there is yet the introduction of liquid into the circulation, while, on the other hand, through the necessary rapidity of the intervention, it may be difficult to exclude absolutely—in a particular instance—the possibility of the return of the vital manifestations, even without a special influence of the oxygenated water (hydrogen peroxide).

It seems to us, however, that these objections collide against some proved facts, even without considering the controlling experiments.

Even in the animals in which the cardiac contractions continue and the thorax is opened, the endotracheal injection of oxygenated water (hydrogen peroxide) will hasten the pulsations and increase the vitality of the cardiac impulse, at the same time that the heart gets filled and the oxygenated water enters into its cavities.

After this, it must be assumed that the oxygenated water (hydrogen peroxide) by endotracheal injection is also a good means of strengthening the cardiac activity, and as we know that the increasing of this power means increased chances of connecting the vital tripod, there cannot be the least doubt but that—be it even in special cases—the injections of oxygenated water in the trachea may conduce to revivification.

However, it is not beyond the practical possibilities, that in a case in which the heart still pulsates, one cannot succeed in restoring life.

Further researches in this direction, taking into account the physiological basis and the harmlessness of the intervention, will logically cause these experiments to be extended, besides affording more specific indications for cases allied to those which are referred to in the present note.

OPERATING THEATRES.

ST. THOMAS'S HOSPITAL.

Partial Separation of the Upper Epiphysis of the Femur—Hæmarthrus.—Mr. Edred M. Corner operated on a boy, æt. 15, who had fallen while riding his bicycle and sustained an injury to his right hip. He took no notice of it at the time, but a fortnight later he found that the joint was becoming painful. He managed, however, to continue his occupation of house-boy for another three weeks, when, coming downstairs one morning, his leg suddenly gave way, and he found himself completely unable to move it again. He was brought up to St. Thomas's Hospital, where he was examined and thought to be suffering from acute epiphysitis following on previous separation of the epiphysis. The limb was slightly flexed, with marked eversion. Any attempt at movement caused great pain. Temperature was 101° and pulse 100.

An open operation was performed the same night, and the joint exposed through Murphy's incision. The capsule of the joint was found to be œdematous, and the joint itself was filled with old dark blood. No actual pus was seen. There was a partial separation of the epiphysis, which was, at the time of operation, firmly joined to the shaft, except at one point, where the neighbouring bone was eroded. The blood was removed. The wound was stitched up in the usual manner, the wound being drained for two days. At first the limb was put in extension, a long outside splint being applied to the sound side. Later this was discarded for a Style's splint.

Ten days after the operation everything was going on satisfactorily. Mr. Corner said it was intended to keep the splint on for about six months before allowing free exercise of the joint.

Mr. Corner remarked that the great clinical difficulty was that of diagnosis. The boy was thought to have an acute arthritis of the hip-joint. In reality he had in part separated and displaced the upper epiphysis of his femur some time before, and now had an auto-infection of the blood in his joint—hæmarthrus. On seeing the case for the first time, Mr. Corner did not know this. The factor of greatest clinical service was, he pointed out, the operation of exposing the hip-joint by detaching the tip of the great trochanter. The exposure of the joint was so good as to allow the surgeon to see with ease the displacement of the epiphysis. Moreover, it could be ascertained that union had already occurred between the epiphysis and the diaphysis. Therefore there was no need to unite them as by a screw.

A case of Arthroplasty of Hip.—The same surgeon operated on a girl, æt. 16. In March, 1910, the patient fell on her right hip which later (May) became painful, later becoming stiff. A skiagraph showed no evidence of injury to bone, so that the ankylosis was due to some form of arthritis. The operation was performed at a meeting of the International Medical Congress. After separation of the bones it was seen that some cartilage still existed on the head of the femur. The acetabulum was then cleared and covered by a piece of fascia lata. The head of the femur was then replaced in the joint. Ten days after operation with unaided efforts the girl comfortably flexed the hip through 90 degrees. Subsequently to leaving the hospital she had a lot of pain in the new hip joint, which it was feared would lead to limitation, perhaps only temporary, of its movements.

CHILDREN'S HOSPITAL, GREAT ORMOND STREET.

Case in which the Approach to the Hip Joint by Detaching the Tip of the Trochanter enabled the Surgeon to make a new Hip Joint, a Nearthrosis, successfully.—The case operated on was that of a little girl, æt. 5, with old tuberculous disease of both hips, many operations, unilateral arthroplasty. She had bony ankylosis of the right hip and fibrous ankylosis of the left hip. There was a little movement in the left hip. Neither hip could be abducted easily, and she had previously been in the hospital for crossed adducted legs. The legs were then separated by "extensions" to each side of the bed. But the condition recurred doubtless owing to the mechanical advantage which the adductors have over the abductors. It was decided to do an arthroplasty on the right hip joint, so that by making that a free joint the condition could be relieved. The operation was done as here advocated with a fascia flap placed in the acetabulum and a covering of Baer's membrane on the head of the femur. Mr. Corner said that the success of operation for one ankylosed hip, when both are ankylosed, gives the patient so much relief that no operation may even be required on the other side. He pointed out that this case illustrated what is the greatest bar to perfect success of arthroplasty in growing subjects where the hip has been "out" for some time. The upper end of the femur becomes twisted forwards as it grows against the side of the pelvis. The new joint is made first and a sub-trochanteric osteotomy is done later.

TRANSACTIONS OF SOCIETIES.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, December 11th, 1913.

The President, Dr. David Walsh, in the chair.

The President showed a case of an acute generalised coccic dermatitis treated with an autogenous vaccine.

C. D., æt. 42, m., stationer's assistant, came to hospital, October 21st, complaining of an irritating rash that began on hands about three weeks previously and is now generalising. The hands were dusky red, swollen and desquamating in thick flakes on the palms; the arms were swollen, red and desquamating. The trunk covered with patches and sheets of fine papulous rash. Patient said rash was sometimes moist and the discharge stiffened linen. Twenty years ago he had inflammation of the lungs and pleurisy. There was not much general disturbance, but the patient looked the picture of misery, as he had slept but little, owing to the irritation. There were some irregular superficial ulcers near the left ankle. He was practically bald on the upper part of scalp, and the rash affected scalp and face. He walked lame as the result of the dermatitis around knee and altogether was the picture of misery. Ordinary soothing and antiseptic remedies with quinine internally had little effect.

A pure culture was obtained by the Hospital Pathologist, Dr. D. Benjafield, of staphylococcus aureus from a bleb on the back of the hand. The first dose of 50,000 was given on November 5th. Immediate improvement followed. On 12th, 100 million; on 19th, 150 million; patient did not come next week, but on getting rather worse returned, and on December 3rd had 200 millions; on December 10th he was given 250 million. The improvement was rapid and progressive—the ulcers on the legs healed—the rash faded and the patient was—as he expressed it—like another man.

There was a history of chronic dyspepsia; but no palpitation nor dyspnœa. There were no valvular murmurs; but the arteries at wrist showed moderate arterio-sclerosis.

The case shows in a striking way the value of an autogenous vaccine on a severe dermatitis. My thanks are due to Dr. Benjafield for his care of the patient.

Dr. Alfred Eddowes showed a case of acne possessing some special points of interest. The patient, a healthy man, æt. 46, stated that ten years ago he observed several points like little boils on his forehead. He went to and attended for a long time a well-known skin hospital in London, and afterwards consulted doctors in private, but only obtained temporary improvement. He was becoming pitted all over the face as if by small scars of small-pox. When he came under Dr. Eddowes' care a few weeks ago many lesions were present, and they all had essentially the same character. They were neither cystic nor like the ordinary acne punctata, but were firm, almost hemispherical; not actively inflamed nor obviously suppurating; always umbilicated and showed a remarkable resemblance to a small, slowly developing molluscum contagiosum papules. In fact it might be termed a molluscoid acne or folliculitis. Their resistance to remedies was great, so to overcome that a treatment was adopted which the exhibitor strongly recommended in such cases—viz., the introduction of a droplet of pure liquefied phenol by means of the eye of a fine darning needle. Cultures showed staphylococcus aureus and a short-chain streptococcus.

The President considered it was a varioloid condition, with scanty lesions, exceedingly chronic and rebellious to treatment.

Dr. Norman Meachen showed a case of dermatitis verrucosa in a cowman, æt. 49, who had had a lesion on the back of his right hand for four months. It began as a small, roughened area, which the patient called a wart. It spread towards the wrist, and he thought it had a fungous origin. It was covered by small granular papillary excrescences, from which a sanious discharge exuded on squeezing. He had made a search for the blastomyces, but hitherto without result. There was no family history of tuberculosis. The axillary glands were slightly enlarged, and the femoral glands were palpable.

The President suggested that Dr. Meachen should report again later. He remembered a similar case in a butcher, who had it on the site of an accident with a meat hook. It was found to be due to a fungus.

Dr. Eddowes regarded it as a *post-mortem* wart verruca necrogenica. He had treated and watched such cases in butchers many years ago, and before he was aware they were due to tubercular infection he was in the habit of painting them with strong carbolic acid and then poulticing them. The result was satisfactory.

Dr. Samuel said Biersdorf's salicylic and creosote plasters (No. 78) cleared these conditions of lupus verrucosus up remarkably well without any additional treatment. The physical signs here fitted in with the pictures of blastomycosis, but he felt that for all that our old friend the tubercle bacillus was just teasing us once more.

Dr. C. G. Mack said he regarded the enlarged glands in the axilla as tubercular.

Dr. Meachen replied that there was no history of tubercle in the family, and the patient was a healthy man. Four months would be a short history for a tubercular lesion, and in spite of the negative findings it resembled fungous disease more than tubercle. He would report later.

Dr. H. C. Samuel showed (1) seborrhœa on a syphilitic basis, or rather syphilis on seborrhœic soil. The patient, a man æt. 64, came to University College Hospital that day. It was diagnosed a year ago as psoriasis, and subsequently scars and pigmentation were seen at the axillæ, which were certainly syphilitic. Wassermann was positive. The lesions cleared up under the usual treatment, and since then attention has been devoted to the seborrhœic condition. He had developed some new lesions on the back which looked like circinate seborrhœa: seborrhœic dermatitis; they, however, seemed more infiltrated than ordinary seborrhœa. There was also atrophy on the back of his hands, so-called "tropical skin," with pigmentation, but he had never been in the tropics. He has other evidence of tertiary syphilis, but the circinate follicular lesions on the back are in typical situation, and have the typical colour and general appearance of seborrhœic dermatitis (so-called lichen circinatus or circumscriptus).

The President said he did not see why it should not be seborrhœa on a syphilitic basis, a suggestion that was borne out by the scarring on one of the patches near the left knee. Dr. Norman Walker believed that seborrhœa was the starting point of many syphilitic lesions, and he agreed. There probably was good reason for these localisations.

Dr. Samuel replied that so many of the manifestations of disease seen depended on the type of patient. A patient the subject of acne who caught syphilis would develop acneiform syphilis. Others again who were liable to psoriasis or seborrhœic dermatitis would, if they contracted syphilis, tend to show types of syphilitic rashes, which were of a seborrhœic or psoriasiform type, and so on.

(2) CASE OF LUPUS ERYTHEMATOSUS TREATED BY UNNA'S MICROBRENNER.

The patient, a man, had had the condition of his face 16 months. The lesions consist of erythematous patches with grey (mortar like) adhesive scales, and some thin superficial scarring. The case was very rebellious to treatment; he had received all the usual internal and external treatments, including salicin quin. internally, and locally such applications as lotio calaminæ, the solid stick of CO_2 snow, and the solution of CO_2 in acetone. Yet for some reason or other the disease failed to clear up. So one tried the effect of soft soap dressings, as recommended by Hebra—this again proved futile—recently one has been utilising Unna's microbrenner, touching the parts lightly here and there, and although so far this treatment has yielded the best results and has had the effect of limiting the spread, yet one is not satisfied, and we propose treating it with the Kromayer lamp (mercury vapour), which in these chronic cases is the last card, and generally a trump card which rarely fails. I show the case to demonstrate the exception (which proves the rule) that CO_2 snow is not *always* the specific for these chronic cases of lupus erythematosus which it] is claimed to be.

The President asked whether syphilis and tuberculosis had been excluded. He deprecated Dr. Samuel's strong views about the Von Pirquet reaction. He, Dr. Walsh, would be sorry to be without Von Pirquet, despite its fallacies. He would not hesitate to use tuberculin after excluding gross pulmonary tuberculosis, which could be done by ordinary careful examination.

Dr. Norman Meachen said care should be taken in applying to any form of treatment the term "specific." He believed the word had been used concerning the use of CO_2 for lupus erythematosus. It was specific simply in producing a local reaction, and by aiding the production of anti-bodies. If one exceeded that a destructive lesion and scarring ensued. The best way of using the snow for this condition was by lightly touching with the crayon for not more than twenty seconds at a time. But he would not call it a specific treatment.

Dr. Samuel replied that he did not mean that CO_2 snow was specific in the strict literal sense, but that in chronic cases the local application of CO_2 was one of the best to use, and he only used the snow in chronic cases. He agreed only short applications should be made, sufficient to produce that local reaction which would assist the patient to combat the disease; not with the object of destroying the structure. A *negative* Von Pirquet in the adult was important, as it showed there was no tubercle elsewhere. Most people had had tubercle at some period, and it was not surprising that in 70 to 80 per cent. of adults the Von Pirquet was positive, though there might be no active tubercle. The test had not been done in the present case because he had no faith in it. Syphilis had not occurred to him; if it had been that disease there would have been more destruction and scarring by this time.

(3) CASE OF LEUCOPLAKIA OF TONGUE CURED BY REMOVAL OF TEETH.

The patient was a middle-aged woman, in whom leukoplakia appeared four months ago. The condition was thought to be probably specific, but it did not respond to potassium iodide or salvarsan, and the Wassermann was negative. She suffered severely from pyorrhœa and dental caries, and after the removal of the teeth the leucoplakia had cleared up. The leucoplakia was so advanced that it was difficult to believe that the teeth were the only factor in the case, and one could not resist still holding the syphilitic theory—but after the teeth were removed and artificial ones restored the whole of the advanced and painful leucoplakia disappeared.

The President said that dentists had not yet found a scientific treatment for pyorrhœa. In this case the result of removal of the teeth was very striking. Moreover, in a woman of this age, to clear up her leucoplakia was a very important matter, on account of the possibility of malignant developments.

Dr. Vinrace wished to raise a protest against such a wholesale removal of teeth for such a cause. Some people handed over patients to the dentist to be converted into edentate monsters on very slight data. He would like to know whether any measures were taken to preserve the teeth instead of removing them.

Dr. Samuel replied that Dr. Vinrace's remarks would have been modified considerably if he had seen the condition of the woman's mouth when she was first shown.

Dr. Vinrace showed (1) a case of tertiary syphilis in a woman æt. 52. Her first pregnancy, at æt. 18, was a miscarriage. She had an ulceration on her foot four years after, viz., thirty years ago, and it healed up; but it broke out again 3½ years ago, and only healed after 18 months' treatment with iodide of potassium. Twelve months' recent treatment, including mercury and iodide of potassium and 0.1 gramme of salvarsan hypodermically on November 21st had made no difference to the lesions on the dorsa of the feet which had been persistently raw, scaly and foliaceous. Salvarsan he was abandoning because it produced such severe local reaction. If the Wassermann test proved positive, he intended to give salvarsan intravenously.

The President considered that the salvarsan was given in too small a dose. He did not consider that iodide of potassium and the ordinary treatment would be of any use in such cases.

(2) Case of telangiectasis and scarring of the face in a barman. At the present time some active lesions, probably staphylococcic. Nine years ago he had "barbers' rash." If members had seen the case from a medico-legal aspect what would they say the scarring was due to? And would they say the telangiectases were due to the cutaneous condition, or incidental to the man's occupation as a barman?

The President said the condition was like the scarring left by acne. He did not know what the telangiectasis meant, except that it was probably connected with alcohol, bearing in mind the patient's occupation. The mitral sound was somewhat abnormal. He recommended treatment by an autogenous vaccine.

Dr. H. Eddowes said that telangiectasis on the face could be produced if enough follicles or glands were distributed in the acne process, because if they were swollen and crowded together, they interfered with the venous return by the radical (vertical) veins leading from the papillary layer.

Dr. H. C. Samuel suggested that the condition might be associated with some cirrhosis of the liver.

Mr. T. P. Beddoes showed a case of keratosis of the palms in a man, of ten years' duration. A marked feature was the manner in which the sweat pores were attacked.

The President said Mr. Beddoes was fortunate in getting a patient at hospital with that condition. Though he had had the affection two years it caused him no physical discomfort.

Dr. Eddowes said it was particularly interesting to see a disease attacking the sweat pores in this manner so sharply defined. He thought dermatologists had paid too exclusive attention to follicular infection, and were inclined to forget the many possibilities of infection of the sweat apparatus. In the case before them there was almost certainly some infective material in the pores. He would relate a case showing how a man's palm had become infected with organisms which had lain hidden there probably for some years. It was a case seen by the late Dr. Crocker, that of a gardener who had an inflammation of one hand spreading like erysipelas and causing much swelling and pain. The attacks occurred summer after summer. Dr. Eddowes saw the man in the third attack. The condition was soon improved by treatment, but recurred during succeeding hot weather. He had dressed the hands with antiseptics in such a way that it was impossible to see how germs could get into the palm of the hand while the parts were so thoroughly protected by the enveloping dressing. One day on removing the dressing a small abscess could be seen in the centre of the palm. This was punctured and yielded a beautiful, deep-coloured pure culture of staphylococcus aureus. The speaker believed that organisms on getting into the sweat pores met with acid material which did not suit them; they were not killed but were rendered inactive. There was nothing in the pores to encourage the growth of these organisms until something was added, such as an effusion of serum, which by neutralising the acid converted the moisture into a culture medium when, of course, irritation might be lighted up through the formation of toxins. He believed he was the first in this country to call attention to plantar warts. Now we know that warts are due to infection. If that infection were not introduced by a gross lesion, such as a scratch or other wound the germs must enter by way of the pores there being no follicles present.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, December 5th, 1913.

The President, J. F. O'Carroll, M.D., F.R.C.P.I., in the Chair.

A CASE OF RAYNAUD'S DISEASE.

Dr. Drury showed a man, æt. 32, who had this disease. He had been in India. Two years ago he was engaged as a night porter. At the beginning of the present winter the disease began in his hands. When first seen four weeks ago his right hand was in a condition of local asphyxia and the other hand showed a commencing gangrene, the whole hand being blue and intensely cold. He never permitted the patient to wash his hands, fearing sepsis. There was no albumen or sugar in the urine, and he gave a negative Wassermann. The condition came on quite quickly, and its acute course was of interest. No pulse could be felt in the left wrist, and in the right it was scarcely perceptible. He was treated with alcohol and chloride of calcium, first five and then ten grain doses per diem. There was much pain at the beginning, and opium had to be administered at night. The patient was at work up to six weeks ago. No signs of cardiac disease could be discovered.

UNUSUAL SEQUELÆ OF TYPHOID FEVER.

Dr. A. R. Parsons showed a patient with enormous dilatation of the veins on the abdominal wall. The man had typhoid in 1893. The onset of very acute pain in the right iliac fossa had caused so much suspicion of perforation that laparotomy was performed. No perforation was found, and the patient made a comparatively uneventful recovery. Two years later the patient showed signs of obstruction in the two iliac veins, or perhaps in the inferior vena cava. No inconvenience was experienced by the patient.

Mr. R. Atkinson Stoney showed a patient, æt. 41, in a very similar condition. When in South Africa in 1901 he had enteric fever. Was in hospital for three months, in bed the whole time, with two relapses. No bleeding from the bowels at any time. In convalescent camp for one month, then during voyage home noticed swelling of both legs for the first time, most marked in the right leg, which was said to have been 5½ inches larger than normal. No enlargement of veins of legs noticed at this time, but veins on front of abdomen were noticed to be enlarging. Was in a convalescent home in England for two months, and was then discharged from the army. Has since been in the Canadian Police. Veins in legs became enlarged while in that force in 1904; enlarged veins in thigh gave trouble when riding. Varicose ulcers first formed on legs in 1910, healed and broke down twice since then. At present there was a very large tortuous vein running up on each side of the abdomen from below the middle of Poupart's ligaments to the corresponding axillæ, the blood flow free in either direction. There was another large tortuous vein running on each side of the middle line from the same origin to the front of the sternum. The femoral vein could be felt as a hard cord in each leg up to Poupart's ligament. The condition was probably due to occlusion of iliac veins and inferior vena cava.

Sir John Moore related a case of his which resembled these cases, but the dilatation of the superficial abdominal veins was unilateral.

The **President** and **Drs. Moorhead** and **Law** discussed the condition. There was a general feeling that thrombosis of the femoral veins was a more frequent sequel of typhoid than statistics led one to believe.

ENDOCARDITIS LENTA.

Dr. Gillman Moorhead read a paper on this subject, and showed the organs from a patient who had succumbed to the disease. The condition had supervened on a chronic endocarditis. The aortic valves became infected after the mitral valves. The spleen was enlarged, and there was moderate nephritis. Streptococcus viridans had been cultivated during life from the blood, and recovered also *post mortem* from the valves.

The **President** thanked Dr. Moorhead for his contribution, as he considered it a distinct acquisition to know that this type of endocarditis had a definite coccus as its recognised cause. A point which came into his mind was that when a case came into hospital with an old cardiac lesion one was prone to assume that the patient was tired from the effects of his old disease, whereas he might have a new endocarditis.

Sir John Moore and **Drs. Nesbitt, Crofton,** and **O'Kelly** discussed the condition.

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

Meeting held Wednesday, December 17th, 1913.

Mr. Charles Heath in the Chair.

Mr. Heath read notes on a case of aural suppuration and rapid metaplasia of the covering epithelium of the antral lining, and showed microscopical slides. The attack of otitis media followed a cold in the head. The infection was a diphtheroid bacillus (Hoffmann's). There were no squames in the discharge at the first examination. Autogenous vaccines were given. Two days later there were a few squames in the discharge. The patient was confined to bed and warmth applied to the ear. At the end of a fortnight squames were found in great abundance in the discharge. The hearing had meanwhile considerably deteriorated, due (in his opinion) to swelling of attic and tympanic mucous membrane. After a consultation with Dr. Jakins, it was decided to operate by the conservative method in order to arrest disease and prevent deafness. At the operation the pericranium and bone were found to be vascular, and there was pus in the antrum. The lining of the cavity was greatly thickened and the attic was obstructed by swollen mucous membrane. Dr. Wingrave's report upon the structure of the antral lining was as follows:—"The tissue is granulomatous of a simple type, covered with a distinctly thickened layer of stratified epithelium, whose upper layers are distinctly squamous. Plasma cells are numerous, mixed with lymphocytes and rudimentary blood-vessels. There are no 'giant' and no 'syncytial' cells. The epithelium well illustrates metaplastic changes from the simple flattened or cubical type which normally lines the cavity." Mr. Heath pointed out that such clear evidence of rapid metaplasia is rarely forthcoming, but the history of perfect hearing in both ears up to the onset of otitis media cannot in this instance be questioned. The case affords definite proof of the metaplastic change which Dr. Wingrave was the first to describe and of the rapidity with which it may occur. Mr. Heath wished to emphasise the need of early surgical assistance in such cases with the object of preventing deafness, and for this purpose had brought the matter before the Society. Only four weeks had elapsed since the operation, yet the perforation had healed and the hearing was now equal on the two sides.

Mr. Heath also showed several preparations of healthy recent temporal bones, which illustrated some of the causes of perpetuation of discharge after an attack of otitis media: (1) the inner tympanic wall, showing an unusual sinus beneath the promontory; (2) the inner wall of the tympanum, showing three unusual sinuses, one of which is sub-Eustachian; (3) a bone showing the external semi-circular canal projecting into the aditus; (4) a safe antrum with smooth walls and a lining of mucous membrane; (5) a bone showing the route of antral drainage through Shrapnell's membrane; (6) large bone cells in the mastoid process which are separated from the mastoid antrum by muco-periosteum only; (7) a temporal bone showing corpuscular bodies in the antrum, also that drainage escaping through Shrapnell's membrane does not pass through the tympanum at all; (8) the inner wall of the tympanum, showing fibrous fixation of the stapes resulting from long past disease; (9) bone showing the sclerosing effect of chronic aural suppuration.

Mr. Adair-Dighton, Dr. Frederick Spicer, and Dr. Percy Jakins each congratulated Mr. Heath on the excellent preparation of these bones, and pointed out that their educational value was very great, and that they hoped Mr. Heath would exhibit them again on some future occasion.

Dr. Walker Wood read notes of a case which illustrates the value of the naso-pharyngoscope (Holmes's) in the diagnosis of naso-pharyngeal and aural conditions. Miss H., æt. 50, complained of tinnitus and deafness in the left ear and a feeling of a foreign body in the throat. Both ears showed signs of chronic middle-ear catarrh. Ordinary post-rhinoscopic examination was impossible. Naso-pharyngoscopic examination with Holmes's instrument showed the right side to be normal, and on the left side a cyst was found occupying Rosenmüller's fossa, a coloured drawing and microscopic specimen of which were shown. The cyst was removed through Yankhauer's speculum. This was followed by complete relief of abnormal pharyngeal sensation and tinnitus. The hearing also improved. The case had been under treatment for tinnitus in France and Switzerland without the cause being discovered. Dr. Wood expressed the opinion that the cyst in this case was due to cystic degeneration of an adenoid mass in the lateral recess of the pharynx (Rosenmüller's fossa). Microscopic appearances endorsed this view. He found that cysts in this region were very rare, and had been unable to find any recorded cases. He had examined the naso-pharynx in 1,850 cases. He also referred to the difficulty in many cases of post-rhinoscopic examination. By Holmes's method it was always possible to make a painless and thorough examination. He cited several other cases in his own experience and those of others at home and in America.

Dr. Frederick Spicer congratulated Dr. Wood on his interesting and instructive case, and expressed his opinion that this method of examining the naso-pharynx had not been sufficiently appreciated.

Mr. Charles Heath said that Dr. Wood had examined a great number of his patients by this method, and the information thus obtained was occasionally of great importance.

Dr. Percy Jakins and Dr. H. D. McCulloch also took part in the discussion, and Dr. Walker Wood replied.

LIVERPOOL MEDICAL INSTITUTION.

The Second Pathological Meeting of the Session was held on Thursday, December 11th, 1913.

Dr. Lloyd Roberts in the Chair.

The following specimens were shown and described:—

Dr. Leith Murray showed three cases (two of which were under the care of the late Dr. A. Wallace) of adenomyoma of the posterior vaginal wall immediately below, but distinct from, the cervix. In two of these the growth, histologically simple and identical with a uterine adenomyoma, but burrowed through the recto-vaginal septum and infiltrated the wall of the rectum. Dr. Murray discussed the ætiology.

Dr. N. Raw: Carcinoma of stomach involving œsophagus.

Mr. Litler Jones: (1) Hydronephrotic kidney with papilloma of the ureter; (2) sequestrum of lower jaw.

Mr. Litler Jones and Dr. Buchanan: Human "hair ball."

Mr. G. P. Newbolt and Dr. Murray Cairns: Human "hair ball" weighing 4½ lb., which had been successfully removed by Mr. Newbolt from the stomach of a girl, æt. 16.

Mr. G. P. Newbolt: (1) Human "hair ball" weighing 9 oz., which he had successfully removed in the year 1908. In this case a bismuth X-ray photograph clearly showed the outline of the hair ball; (2) round-celled sarcoma of the bladder wall; (3) carcinoma of the kidney.

Mr. R. C. Dun: (1) Lymphadenoma; (2) vermiform appendix containing thread worms.

Professor E. Glynn: (1) Two human "hair balls"; (2) "hair balls" from animals.

Dr. W. B. Warrington: Tumour in the right posterior fossa of the cerebellum. It was the size of a small walnut, growing between the fifth and seventh nerves. During life the only focal symptom was right corneal areflexia. The posterior fossa was explored on the right side, but owing to the interior and anterior site of the tumour its presence was not detected at the operation. Histologically the tumour was composed of innocent fibrous tissue.

Professor J. W. W. Stephens and Mr. F. Jeans: Chinese lady's foot. Surgically it is in a condition of pes cavus, whilst pathologically the deformity is mainly produced by a change in the os calcis, which is L-shaped, the patient walking on the insertion of the tendo Achillis.

Professor J. W. W. Stephens: (1) Bilharzia of bladder and intestine; (2) guinea worm; (3) colour photographs from lip of tsetse fly; (4) redshank trapped by cockle; (5) fossil tsetse fly; (6) bot parasite on tapeworm.

Dr. Blair Bell: Sarcoma of the ovary.

The specimens were discussed by Mr. F. Paul, Dr. Thurstan Holland, Mr. G. P. Newbolt, and Mr. Litler Jones.

Professor J. W. W. Stephens read a paper on

THE RELATION OF BLACKWATER FEVER TO MALARIA.

Dr. Prout discussed the paper and said that he supported Professor Stephens in his view as to the relationship between malaria and blackwater fever. The more he had seen of this disease in the Tropics—and his experience was very considerable—the more he was impressed from a clinical point of view with its relationship to malaria. He thought some of the figures cited by Dr. Stephens very convincing, and he considered that additional confirmatory evidence might be cited in the results of the prophylactic use of quinine. Where this had been systematically done, it had been found that blackwater fever had diminished as well as malaria.

Dr. Lloyd Roberts, Dr. Bradley Hughes, Dr. Stallybras and Dr. Harcourt also spoke.

Professor Stephens replied.

SPECIAL REPORTS.

POLICY OF THE PLUMBERS' COMPANY.

In the Hall of the Armourers' and Braziers' Company, the Livery dinner of the Plumbers' Company was recently held. The Master, Mr. W. D. Caröe, M.A., presided, and there were present many guests, including the Lord Mayor (Sir Vansittart Bowater), the Master of the Armourers' Company (Dr. G. Newton Pitt), Sir John Anderson, G.C.M.G. (Colonial Office), Dr. F. J. Waldo, J.P. (Warden), Sir Shirley F. Murphy, Dr. A. E. Newsholme, C.B. (Medical Officer, Local Government Board), Mr. Frederick M. Simpson, F.R.I.B.A., Dr. Herbert Williams (M.O.H., Port of London), and Dr. S. Squire Sprigge.

Sir Shirley F. Murphy said that the Plumbers' Company, as they were aware, had done important work in improving the standard of plumbing in this country. It always hoped by increased powers to do still more, for there was no want of will on the part of the Company. (Hear, hear.) Turning to the Corporation, he said that recently he was looking through some old records, and he realised, as never before, what that body had done, not only for the citizens, but for the whole of England. He was sure that everyone would say that the Lord Mayor and the Corporation had always recognised their responsibility in regard to public health.

Proposing the toast of "Public Health and the Plumbers' Company," the Lord Mayor said he thought the Corporation and the Plumbers' Company went together, for both were doing all they possibly could for the public health. There was no doubt about it, that the Company was doing a real good service to the City, and not only the City, but to the entire Empire, because if we could not have good plumbers we could not have good sanitary houses. No man had any right to call himself a plumber and act as a plumber unless he were really qualified and had gone through some examination to fit himself for that position. It must be an enormous boon that there should be such a company that would labour as the Plumbers' Company had done for those engaged in the industry. (Hear, hear.)

The Chairman, in responding, said that it was the aim of the Company to improve the public health through the improvement of plumbing work. While their charter, which was granted by King Edward III., was undoubtedly intended in a secondary way for the protection of the plumber, it was intended primarily for the protection of the public health, so their association with public health went back a very long way. There was no doubt that the old plumbers were extraordinarily skilful people so far as they went. Recently he had the privilege of cutting off a piece of pipe from one of the old abbeys, that at Furness, and no modern plumber had been able to tell him how the pipe was made. They admitted that they could not make such a pipe to-day. He had no doubt it was because the plumbing work in the Middle Ages was so well done that our buildings had lasted so long. When they came to the Victorian era, he was afraid the work of the plumber went to smash. The fact was that in those days houses commenced to spread to the suburbs, the jerry-builder came to the fore, and the jerry-plumber also came to the fore.

At a congress held at Liverpool the Plumbers' Company were asked to put their hands to the plough and see whether they could alter matters somewhat. They asked for registration as a method of improving the status of their trade, and always associated with it examinations, practical tests, and so on, because registration by itself was useless. They introduced a Bill in the House of Commons on those lines and spent a vast amount of money, but owing to the Government dissolving, the Bill went to the wall. A good deal of money had been spent for nothing. Finally they came to the conclusion that they must proceed on other lines. In New Zealand, which was one of the leading colonies, the Plumbers' Registration Bill had been adopted, and there every plumber had to be registered on the lines advocated in the Bill promoted by the Plumbers' Company. By the registration system the matter had been handed over, as far as possible, to the plumbers themselves, which was a democratic advance, and he was bound to say that the master plumbers and the operatives had taken a great deal of interest in the suggestion.

The Company had always recognised that associated with the plumber and his interests were the public, and they had always working with them representatives of corporations, water boards, and health authorities. They had met with a great deal of opposition. Ironmongers and people of that kind who called themselves plumbers seemed to think that they would be snuffed out if there was registration. Then there had been a curious form of opposition, mostly from Radical Members of Parliament, who feared that an aristocracy of trade was being created, but nothing more absurd than that idea could have been conceived. Referring to the system of marking plumbers' work by the men's registered numbers and the marks of the employers, the Chairman said that it entirely dissociated the registered man from the ordinary man who had no association with the scheme. He was glad to think that they had followed the lines of some of the other City Companies. Recently the Goldsmiths' Company had been doing some plumbing work and had adopted the mark system. The City of London would be doing a great deal to further the objects of the Plumbers' Company if they would pass to their officials the order to mark plumbing work done for the City. If Water Boards' engineers, architects, and Corporation engineers would take the matter up, the Company's work in that direction would be done; but, of course, if they did not get that support, they might retire from the business. They had received a great deal of support, but the point that had given him satisfaction was the support received from the men themselves. The men had always loyally supported the work the Company had done, and they recognised that it was to their advantage. (Applause.) It cost a little more, but he felt sure that builders would find it to their advantage if they could say to their tenants that the whole of their houses had been marked by the system of the Plumbers' Company. (Applause.)

Dr. G. Newton Pitt (Master of the Armourers and Brasiers' Company) also responded. He said that perhaps more than the general public the medical profession appreciated the magnificent work that was being done by the Company.

Ald. Sir T. Vezey Strong, proposing the toast of "The Guests," said that unless they could show to the skilful operatives that there was some real trade advantage in belonging to the mark movement they would be slow to recognise on the abstract standard of greater efficiency the inducement to pay even a small subscription. They all believed that it was of the first importance to protect the health and prolong the lives of the public.

Sir B. A. Whitelegge also acknowledged the toast, remarking that the Plumbers' Company, like so many of the City Guilds, had taken a wide view of their responsibilities and opportunities. The idea of associating the work of the individual by a mark seemed to him a most delightful one. Some of them worked in another branch of public health, which consisted of the examination of sanitary inspectors, and in that he had had the assistance of their excellent clerk, Mr. W. R. E. Coles, and had good reason for admiring his untiring efforts in that direction. (Hear, hear.)

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 27th, 1913.

INTRAVENOUS INJECTIONS.

From day to day, says Dr. Noel Fiessinger, the method of introducing medicated solutions into the economy through the veins increases in popularity. Numerous drugs are more active when administered in this way, while others cannot be injected into the muscles except at the price of intolerable pain, whereas intravenous injection is indolent. The instruments needed for this method are few and simple —a bandage or a rubber tube and an hæmostatic forceps to fix the ligature above the elbow; tincture of iodine; a glass syringe (2 c.c. or 20 c.c.); a rather short and thick needle.

The patient is lying down, the right arm extended (the right arm is chosen as the veins are more visible than in the left). The ligature is placed on the arm, but not too tightly, and while the veins are being engorged, the syringe with its needle is sterilised by boiling, and a little tincture of iodine painted over the bend of the elbow. The operator must not forget to thoroughly wash his hands before proceeding to manipulate.

The solutions to be injected are varied—electrargol (10 to 20 c.c.), collargol (5 to 20 c.c.):—

Collargol, 1 gr.
Water (sterilised), 100 gr.

Cyanide of mercury (1 to 2 c.c.). This salt of mercury is specially employed for intravenous injections; intramuscular injections are too painful.

Oxycyanide of mercury, 0.01.
Distilled water, 2 c.c.

For one ampoule.

All the varieties of serums can be injected into the veins—those for diphtheria, tetanus, snake bite, etc. The serum must be fresh, and at least 20 c.c. should be injected at a time. Neo-salvarsan is injected according to the method of Ravant. Thirty centig. are dissolved in 20 c.c. of distilled water, freshly sterilised. The solution is drawn up into the syringe after having placed between the needle and the body of the syringe a small glass tube containing a plug of gauze to prevent the entrance of undissolved particles. Everything now being ready, the left hand of the operator embraces the middle of the forearm of the patient; the thumb is placed on the vein about to be punctured to prevent, by gentle pressure, the skin from gliding and the vein from escaping from the pressure of the needle. The air is expelled from the syringe held in the right hand. The veins generally chosen are the cephalic and the basilic. The direction given to the syringe and needle is that of the vein, with a very slight obliquity, the point being directed towards the root of the limb with the bevelled part facing the operator. The skin is pierced by gentle pressure and very obliquely. When this is done, the needle, taking the direction of the vein, enters it laterally or superficially. That the needle has penetrated into the vein is proved by the sudden disappearance of all resistance and the arrival of a drop of blood into the syringe. The syringe is held firmly in the hand, the left hand removes the ligature, and the liquid is slowly injected. When terminated, the needle is withdrawn rapidly, and a little tincture of iodine is applied to the wound; no other dressing.

Some operators insert the needle first and then adapt the syringe, but this method is more delicate and requires some habit.

Several little accidents may occur, mainly due to nervousness on the part of the operator. The liquid may be injected into the cellular tissue by a sudden movement of the patient. The fact will be announced by the patient himself, who will complain of pain, and to the operator by the presence of a swelling. In such case the needle should be withdrawn. No attempt should be made to find the vein again. Moist dressing will be applied to the arm, which is to be immobilised. The vein may be transfixed. The cause is usually due to the needle, which is too fine. The operation should be resumed on another vein.

The vein is invisible. It frequently occurs, especially in women, that the vein cannot be seen. Dissection of the vein is the only way out of the difficulty, or some other way of administration must be chosen.

Air in the vein is an accident of but little consequence, yet precautions should be taken against it. Phlebitis and hæmatome are possible accidents very simple in their treatment—wet compresses, bandage.

Certain general accidents, however, may give rise to some apprehension. Rigor with high temperature: The patient should keep his bed for 24 hours and be put on simple diet. This reaction, according to Dr. Fiessinger, is due to a too sudden destruction of the leucocytes and the setting free of proteolytic ferments.

The advantages of the intravenous method are painlessness of the injection and rapid and direct therapeutic action. Intravenous injections are much less painful than intramuscular injections, and those patients who have been treated by both methods prefer by far the former.

Every practitioner should, from this day, accustom himself to this method of modern therapeutics. After a few trials he will become an expert and recognise all its advantages.

GERMANY.

Berlin, Dec. 27th, 1913.

At the Medizinische Gesellschaft, Hr. Bönniger discussed the

Treatment of Pulmonary Tuberculosis by Artificial Pneumothorax.

The patient on whom the treatment had been carried out was a young woman, æt. 19, who had suffered from serious unilateral tuberculosis of the left lung. She first came under treatment in October, 1911. There had been high fever for weeks, hæmoptysis, copious expectoration, which contained masses of tubercle bacilli. The pneumothorax was now made, and after a year and a half the result was very good. The fever ceased, the patient gained 25 lb. in weight, and at present had no trouble beyond a slight stitch in the left side, no cough, no expectoration, and she was quite able to do her work. But the good result alone was not what made the case so much worth bringing forward, but rather what was shown by the X-rays. Before the operation there was every sign of diffuse tuberculous deposit throughout nearly the whole of the left lung. The second skiagraph showed a pneumothorax at the apex and adhesions at the diaphragm. The third showed slight diminution of the left lung field, but the patchy darkening was almost gone, the left side was a little clearer than the right. On deep inspiration it brightened up less than it did on the opposite side. He had never seen such a result from any kind of treatment during the whole of the ten years he had been working with the X-rays. Such a case spoke not only for the extraordinary effect of treatment by pneumothorax, not in cavernous tuberculosis alone, but it served as a standard as to what could be reached in the treatment of tuberculosis. Here he had to thank Friedmann's remedy. And here he must add that Herr Immelmann would soon be able to show them something similar.

Hr. Blumberg showed a

Large Tumour of the Urethra Cured by Radiation with Mesothorium.

He begged to be allowed to show a patient who had suffered from carcinoma urethræ who had been sent to him from the Schöneberg Hospital as inoperable. The patient was in the hospital from July 25th to September 15th, when she was transferred to his clinic. The patient was 78 years of age. From the commencement of the year the urine had been occasionally bloody, but it soon became so all the time. The condition on admission was as follows:—There was a large, hard, knobby tumour in the anterior wall of the urethra. Commencing about 2 ctm. above the external orifice, it reached upward to the portio vaginalis. At its distal end the growth was nearly two finger-breadths wide. The parts were very inaccessible owing to an ankylosed hip-joint, and X-ray treatment was out of the question. It was thought wise not to give a general anæsthetic. Irridiation with mesothorium caused disappearance of the tumour in a comparatively short time. After three weeks, when about 4,000 milligram hours had been applied, the tumour was distinctly smaller, and in another week it could no longer be felt. A total, therefore, of 6,000 milligram hours had been applied. To make sure, however, another 1,000 were given. The last application was made four weeks ago, and palpation still yielded a negative result. She had been examined by numerous colleagues, who were satisfied that the tumour had disappeared. The speaker was of opinion that the *technique* of application contributed perhaps to the rapid change that had been effected. He had not made use of a lead filter, which might lead to severe burning by secondary rays, but a gold filter, and after that one of brass, which he believed he could specially recommend.

AUSTRIA.

Vienna, Dec. 27th, 1913.

Pavor Nocturnus: Its Treatment by Suggestion.

At the recent meeting of the K.k. Gesellschaft der Aerzte in Vienna, Dr. Fr. Hamburger made a communication on the subject of pavor nocturnus and its equivalents (oneirogenic conditions). A distinction was made between the symptomatic and idiopathic forms of pavor nocturnus. The symptomatic included those forms of nocturnal outcry which are so frequently met with in every possible variety of the febrile disorders of children. On the other hand, idiopathic pavor is nearly always attributable to some agitating experience of daily life. A typical feature of its occurrence is that such attacks repeat themselves for a number of nights, sometimes for even a number of weeks, in continued succession. Various other disturbances of sleep often form an equivalent of pavor nocturnus. Thus Dr. Hamburger had observed a case of frequent coughing during sleep. Other examples are furnished by paroxysmal attatcks of vomiting, of abdominal pain, of fits of laughter, etc. He now proposed that all such disturbances of sleep should be regarded as oneirogenic ("oneiros" = dream). It is of the greatest practical importance in this connection that we should recognise the fact that we are in possession of a therapeutic agent which has the most effective influence on all oneirogenic conditions. This consists purely of the application of "suggestion" during the time of waking: we prescribe five or ten drops of tinctura amara or chinæ, to be taken before going to sleep. And here it is of the utmost importance that we always, in such circumstances, promise the desired result with the most absolute confidence. It is also important that the taking of the medicine should be the last act of the patient before going to sleep. The previously ordained times and succession of evening arrangements and habits should also be altered—including those of getting to bed, and the stated hour for going to sleep. Thus, it should be arranged that children who had been in the habit of having their bath before the evening meal, should now have it after, and *vice versa*. It is also expedient that children should have some new diet prescribed for them for the evening; and it is of the utmost importance that the drops should be administered after evening prayers, which is usually the last procedure before going to bed. No further admonition of any kind whatsoever should be given to the child after the administration of the drops. With this form of therapeutic manipulation we are enabled to effect the cure of pavor nocturnus; and the desired effect depends on the individual physician, who must prescribe it with all the necessary earnestness, the adequate impressiveness, and confident establishment of faith in the effectiveness of its administration to the child, who should be persuaded into an unquestioning belief in its efficacy.

Estimation of Hydrochloric Acid of Gastric Juice without Use of Stomach-pump.

Dr. G. Schwarz made a communication on the subject of testing for hydrochloric acid without using the stomach-pump, in which he pointed out that Spath had, in 1887, introduced a method by means of which (in cases in which the introduction of the stomach-pump was undesirable, or the opposition of the patient made it impossible) the investigation could be carried out by getting the patient to swallow, after the test breakfast, a silk thread, stained with Congo-red, to which a little globe of lead was attached. Friedrich has recently adopted this method of procedure with his "gastrognost." But as the extraction of the leaden globe is accompanied with difficulty, and with sensations of extreme pain to the patient, this formerly celebrated procedure could not become of universal adoption. On this account, Dr. Schwarz has modified the procedure by substitution for the solid globe of metal of a soluble gelatine capsule filled with a heavy powder (pulverised metallic bismuth, barium sulphate, cerium oxide, etc.) The capsule dissolves in the gastric juice, and the unloaded Congo thread, stained more or less according to the degree of acidity, withdrawn without any unpleasant sensations whatever to the patient. If the thread has retained its red colour there is no hydrochloric acid present. In such case, Röntgen-ray illumination should be utilised for the purpose of ascertaining whether the capsule had actually reached the stomach, or had been arrested in its descent by an œsophageal constriction or an hour-glass contraction of the upper part of the stomach.

Dr. E. Schulz held that the procedure thus introduced was not reliable. We could not decide whether the capsule had reached the stomach so far as to be placed in contact with the gastric contents. Whatever experimental value this method may have, it, as in case of other proposed substitutes, can never attain to the reliability of the stomach-pump, far less supplant it. It could also be observed when the gastrognost and the tube had been used on the same individual, that the use of the latter was much less unpleasant to the patient than the swallowing of a string with its attached capsule which it took several minutes to swallow in most cases, after which the string had to be left hanging out of the mouth for half an hour. If, however, we want to dispense with the use of the stomach tube, we can have recourse to the simple, convenient and relatively reliable so-called sodium test, which was introduced by Field, and afterwards modified by Ridner. This consists of getting the person to be experimented on to swallow, after the test-breakfast, a solution of soda (2 grammes in 50 of water), while the ear is applied over the gastric region. When free hydrochloric acid is present, the characteristic sound of effervescence is heard, due to elimination of free carbonic acid gas. In cases of absence or of abnormally loud report of effervescence, we can also conclude the respective absence or relative increase of free hydrochloric acid. This procedure is so very simple that it can be carried out even in business hours and at intervals of two or three hours after the midday meal. It had given the speaker very important directive indications towards therapeutic procedure. He would, however, warn his hearers against regarding any of these "substitution" methods as reliably conclusive with regard to the exact proportion of free hydrochloric acid present.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

GLASGOW.

At the recent meeting of the Glasgow Branch of the Research Defence Society, among other letters of apology for absence read was one from the Right Hon. A. J. Balfour, in which he said: "I am much concerned to hear that, on alleged humanitarian grounds, an effort is being made to hamper research in the Glasgow hospitals by cutting off public subscriptions, on which they depend. I do not in the least impugn the motives of those who are responsible for this policy; I do not doubt either their sincerity or their kindness of heart. But I am firmly convinced that nothing will so minister to the diminution of physical suffering, both among men and animals, as that profounder knowledge of pathology which can only be obtained by patient, long continued, and, alas! costly investigations, such as those which are now being carried on at the Cancer Hospital and elsewhere."

Glasgow Burgh Insurance Committee have now come to a decision as to the allocation among the panel practitioners of the undistributed patients. These are to be allocated equally among those practitioners whose lists are under 1,500, but so as not to raise any list above that number. Any practitioner may, however, decline to have his list augmented by the allocation.

At the annual Christmas meeting in connection with the Western Infirmary, the chairman, Sir Matthew Arthur, Bart., congratulated Dr. Mackintosh on having completed 21 years as medical superintendent. During that period, while the daily average number of occupied beds had grown by about a half, and the number of nurses had increased from under 100 to over 200; the in-patients treated during the year had much more than doubled, having grown from 4,083 to 9,391. That meant, of course, a shorter period of residence, and pointed to greater efficiency.

A very important development in connection with the work of the Infirmary had been the Clinical Laboratory, which so greatly assisted in the diagnosis and treatment of disease. Lady Arthur afterwards presented the nurses' prizes, including the "Florence Nightingale" medal, won by Nurse Margaret Wallace, who also gained the first prizes in both surgical nursing and medical nursing at the examination held in October. Sir George Beatson spoke, and Sir Hector Cameron, who followed, said his memory of nursing in Glasgow went back to the early 'sixties, and at that time the women who nursed were elderly women, for the most part impecunious widows, who took up nursing for want of anything better to do. In regard to education and feeling, they were very much of the same class as present-day charwomen, though there were certainly exceptions who were excellent women. The profession of nursing had developed into a very important one. In a matter of forty years it had taken a very high position in the community, and that really meant that it increased the responsibility of every one of those who entered it. What really constituted nursing was personal character, and they could not have that character in too highly developed a form.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE QUESTION OF REFORM OF THE B.M.A.

To the Editor of The Medical Press and Circular

Sir,—Dr. S. J. Ross agrees with me that the present situation in the B.M.A. is due to the apathy of the majority of members. But does he believe that this apathy is to be overcome by raising the subscription? Will it not rather drive out a large section of the indifferent and discontented? The first thing called for is financial overhaul and reform; the second, the recasting of the administration into a form in which it can act with vigour as the elected and authorised guardian and promotor of the interests of a united profession. In the sphere of finance the *Journal* needs first attention. It is three times too big in every department, but in cutting it down it would not be necessary, as Dr. Ross supposes, to dispense with any essential part. Not as many as 5 per cent. of the scientific papers and lectures of any kind deserve full or verbatim report, They could nearly all be condensed to a quarter with advantage. There are too many editorials, and those too long; whilst the Notes of the Week are each long enough for a leader. Whole sections of uncalled for matter, pages of *Nova et Vetera*, for example, are often put in, whilst the majority of new books which deserve no more than a brief notice get lengthy reviews. The Epitome of Literature is of doubtful value; all that is needed is the briefest possible record of real advance in research and of established progress in diagnosis and treatment. The sum paid to editorial contributors might be cut down one-half; the outlay on the production of the body of the paper might be equally reduced. A circulation of 25,000 a week will always command advertisers. If the charges were increased some might be lost, but income would not be lowered to any important extent. The income from advertisements now amounts to £30,000 a year. A property like the *British Medical Journal*, managed throughout on real business lines, ought to produce an annual profit of £5,000 to £10,000.

I am, Sir, yours truly,
An Obscure Member.

Christmas, 1913.

FAITH HEALING AT UNIVERSITY COLLEGE.

To the Editor of The Medical Press and Circular.

Sir,—It is evident that Dr. Maurice Craig is not in the least to blame for the deplorable fiasco in the attempt to set up a Psycho-Medical Clinic at University College, and that he is, if possible, still less responsible for the harm that has been caused by the reports of the meeting at which inauguration of the Clinic was attempted. The prominence which was given to the report in the *Times* and all the leading London papers led to its reproduction throughout the entire British Press. The report will certainly appear also in due course in all the colonial papers. The meeting took place in University College—an institution representative of everything that is advanced in science and opposed to vulgar credulity and superstition, and the utterances put forth have been naturally accepted by the public as sanctioned by the highest medical authority. The persons primarily responsible for this mischief are, of course, the organisers of the meeting. It is remarkable that no explanation of the procedure and of the selection of a chairman has been forthcoming. In the meantime, the number of miserable dupes of the faith-healing fraternities has been increased, and the operations of the clever quacks who are out only to plunder have been greatly facilitated. Pseudo-religious fanatics of the Christian Science type, and faith-healers who glory in their total ignorance of science, and who sincerely believe in their miraculous powers, have all received encouragement, whilst the cruel, cynical and fraudulent quacks who amass wealth by preying upon hypochondriacs and *malades imaginaires* have gained a real, albeit gratuitous advertisement. I can, as you are aware, support by personal knowledge your statement that a large number of the victims of quackery in this, as in every other line, "are led on to perfectly preventable death whilst relying upon useless methods in cases easily amenable to scientific treatment."

I am, Sir, yours truly,
Scrutator.

December 27th, 1913.

INCOME TAX DEMANDS.

To the Editor of The Medical Press and Circular.

Sir,—The collectors of taxes are now making their annual distribution of demand notes for the current year, the tax for which is payable on or before January 1st next. Before paying the amount demanded your readers should be careful to ascertain that the amount is correct, and that they have been allowed all the deductions to which they are entitled. Particularly they should see that they are not paying inhabited house duty and land tax, for which they are not liable, as it is generally impossible to obtain any repayment of these duties. Repayment of income tax overpaid can now be claimed for the three years ended April 5th last; this applies, of course, more especially to income derived from investments, house property and annuities, and also claims in respect of life assurance premiums and the allowances for children under 16.

We are, Sir, yours truly,
Tax Adjustment Agency.

London, W.
December 29th, 1913.

THE NATIONAL MEDICAL GUILD.

To the Editor of The Medical Press and Circular.

Sir,—In your special report of the meeting held on the 19th inst. a brief summary of some remarks I made occurs under the name of Tompkins, which my best friends would not recognise, as I am Harding H. Tomkins. I wonder if you could spare room to correct the name?

Now that the British Medical Association has not only an Insurance Act Committee to supervise all matters affecting the profession (particularly panel doctors), but an energetic non-panel committee, I, as a non-panel man, cannot see why it should not be able to unite all sections of the profession by efficiently looking after the interests of all, just as well as a large business house can efficiently work several departments. Now that arrangements are on foot for four organising secretaries, "it is up to" the varying sections of the profession to acquaint the Association of their desires and any constructive policy, and by a strong backing enable the Association to act for them, instead of by destructive criticism paralysing all action. Then let every practitioner (whatever else he belongs to) join the Association, and as a united profession work for the commonweal of public and profession alike. So convinced am I of the necessity of a united profession, that I am Secretary of the Local Medical Committee of Essex, and advocate the Association co-ordinating all the Local Medical Committees, for however misguided the panel doctors were in their action, we non-panel should help to work for the good of the whole profession and conform to our original policy of making the Act such as the whole profession could accept. That was the policy I kept my pledge for and what I consistently work for.

I am, Sir, yours truly,
Harding H. Tomkins,
Chairman S.W. Essex Div. B.M.A.

Leyton, Essex.
December 26th, 1913.

THE DISCOVERY OF THE LIFE-CYCLE OF THE ORGANISM OF SYPHILIS.

To the Editor of The Medical Press and Circular.

Sir,—My attention has been drawn to the leading article on "The Discovery of the Life-cycle of the Organism of Syphilis" which appeared in the Medical Press and Circular on December 17th last, and which contained frequently my name with those of my brothers. This article reopens an old controversy about the priority of description of a complex parasite believed to cause syphilis in human beings, the type of which was described in the "Proceedings of the Royal Society" some two years ago. I beg that you will inform your readers that one aspect of this question was published by me in the medical papers a year ago—a point which your article omits to mention. Personally, I would rather not reopen the matter at the present time.

After all, the important thing is to prove experimentally, according to Koch's postulates, that the "bodies" as mentioned in your article are pathogenic parasites at all.

I am, Sir, yours truly,
E. H. Ross.

December 29th, 1913.

OBITUARY.

COL. J. H. NEWMAN, M.D., INDIAN MEDICAL SERVICE.

Col. J. H. Newman, who recently died at his residence, Coolatta, Killinardrish, co. Cork, was a distinguished officer of the Indian Medical Service. He studied medicine in the Queen's College, Cork, and took the degrees in Medicine and Surgery of the Queen's University in 1865. In 1867 he entered the Indian Medical Service, taking part in the Abyssinian campaign of 1868. Later on, in 1878, he was through the Afghan War, and had the medals for both these campaigns. The greater part of his service was passed in Rajputana. He was Civil Surgeon of Ajmere from 1879 to 1892, though occasionally filling temporary posts in higher offices elsewhere. In 1895 he became Principal Medical Officer, and in this year was appointed Inspector-General of Hospitals in Bengal, and also Administrative Medical Officer and Sanitary Commissioner for the Central Provinces. Before his retirement in 1900 he held the same position in the Punjaub. Colonel Newman had a wide reputation in the profession and was beloved by his patients. With many accomplishments, a keen, all-round sportsman, a reliable friend in difficulty or emergency, "Jack" Newman was popular and beloved wherever he went.

DR. J. H. BROWN, OF SHEFFIELD.

We regret to record the death of Dr. John Henry Brown, which took place at his residence, 2 Edgehill Road, Sheffield, on the 12th inst., aged 54. The deceased, who was born at Selby, spent his early life at Whitby. He was educated at Edinburgh University, becoming M.B., C.M. in 1883, and taking the M.D. three years later. After having filled the offices of House Surgeon at Dewsbury Infirmary and Manchester Royal Infirmary, he came to Sheffield about 23 years ago, where he lived for many years in Burngreave Road, and there built up a large general practice, but illness some months ago necessitated his removal to Nether Edge. Dr. Brown was a Freemason. He was Surgeon to the Midland Railway Company in Sheffield district, and took a deep interest in ambulance work among railway workers. He filled the position of President of the Obstetrical Section of the British Medical Association on the occasion of the 1908 visit to Sheffield. Dr. Brown leaves a widow and three children, for whom the deepest sympathy is felt in their sad loss.

REVIEWS OF BOOKS.

BLOOD-PRESSURE. (*a*)

This volume deals with a subject which, as all readers know, has been very much "in the air" of recent years, and is likely to remain so for a good many years to come. The author has, accordingly, done good service to his professional brethren in his present effort "to present in easily accessible form the pith of medical literature bearing on blood-pressure studies in their relation to medicine." And in this garnering process he has not confined himself to the cardiovascular and renal conditions which long limited the purview of investigators in this department of clinical knowledge, but included the most recent results of research in regard to many diseases in which the most careful clinical observation has gone to prove the sterling value of the information supplied by the sphygmomanometer. It is not, of course, an original work, but represents chiefly a skimming of the cream of the medical literature which has appeared on this important subject during the last seven or eight years. The skimming process has been carefully and conscientiously carried out, and every sane reader knows that in such a work it is very much better that the author should not pasteurise his results too freely. We congratulate Dr. Faught—and ourselves—on the fact that he has not done so.

COMPENDIUM OF THE PHARMACOPŒIAS. (*b*)

This useful collection of formularies and lists of drugs has now reached a fourth edition, and forms a handy manual of reference for the medical practitioner, pharmacist and senior student. Amongst the recent and unofficial preparations we note various omissions, which is perhaps inevitable. We should like, however, to see included many other useful preparations, such as Nativelle's digitaline, standardised drugs such as apocynum cannabinum, and the various glidine compounds with iodine, bromine and iron, which are doubteless excluded from lack of space. The well-known Basham's mixture, of such utility in chronic parenchymatous nephritis, is mentioned with its synonym on page 85, but its formula might well be given in full in the synopsis of the United States Pharmacopœia. The list of Latin terms used in prescription writing might be revised with advantage; "gargarissima," for example, would look better with one "s." The list of contents, as compared with the size of the book, is great, and we would venture to suggest that the practical help which this book undoubtedly affords would be still further increased if those portions of it which overlap and are almost identical with portions of other kindred works, were omitted. Such procedure would allow greater revision and expansion of the remainder.

(*a*) "Blood-pressure from the Clinical Standpoint." By Francis Ashley Faught, M.D., formerly Director of the Laboratory of Clinical Medicine of the Medico-Chirurgical Hospital, Philadelphia. Illustrated. Philadelphia: W. B. Saunders Company. 1913.

(*b*) Compendium of the Pharmacopœias and Formularies, with practical aids to prescribing and dispensing." By C. J. S. Thompson, Fellow of the Royal Society of Medicine, &c. Fourth edition. Pp. 360, including index. London: John Bale, Sons and Danielsson, Ltd.

Summary of Recent Medical Literature English and Foreign.

Specially compiled for The Medical Press and Circular.

Gastric Ulcer and Gastric Cancer.—Smithies (*Journ. Amer. Med. Assoc.*, November 15th, 1913) discusses the relation between chronic gastric ulcer and gastric cancer by the aid of an analysis of 566 cases which were operatively and pathologically demonstrated as gastric cancer at the Mayo Clinic. The sex ratio in gastric cancer was found to be approximately that of chronic gastric ulcer—3.1 males to 1 female. More than three-fourths of the cases of gastric cancer occur in persons between the ages of 40 and 70 years; more than one-half of those of chronic gastric ulcer (134 cases) between the ages of 40 and 70 years. A family history, or one of blood relationship, of gastric cancer existed in 9.2 per cent., and of tuberculosis in 1.2 per cent. of the cases. With regard to previous history, 41.8 per cent. of the patients who were proved to have gastric cancer had previously presented the symptoms of chronic ulcer; 17.8 per cent. presented the symptoms of "irregular" gastric ulcer, and 32.1 per cent. had the symptom-complex of gastric cancer without previous history of gastric trouble. Thus more than 60 per cent. of the patients who had gastric cancer presented a history of dyspepsia, and this history was generally that of chronic gastric ulcer. The length of time of all symptoms of the "primary" cancerous group (182 cases) was 7.1 months. The average length of time of the precancerous dyspeptic period in 239 cases was 11.4 years. In this group the supervening period of evident malignancy averaged 6.1 months. In 81 per cent. of the patients in whom prolonged dyspepsia had preceded cancer periodicity of the symptoms was noted in that stage, while in 99 per cent of the patients this periodicity disappeared when the process evidently became malignant. Vomiting was observed in more than 57 per cent. of the cases of gastric cancer, more than 40 per cent. exhibiting delayed vomiting. Of the entire group 15 per cent. gave a history of coffee-ground vomit. Delayed gastric emptying power was evident in nearly two-thirds of the cases in the primary cancer class and in nearly three-fourths of the non-primary division. In 55.4 per cent. of primary gastric cancer cases free hydrochloric acid was absent, and in the non-primary class it was absent in 49 per cent. of the cases. More than 98 per cent. of the gastric cancers were adenocarcinomata, and sarcoma occurred but once in the 566 cases. Benign and malignant ulcers have been found associated in the same stomach. K.

Enteric Fever and Water Disinfection.—Ellis and Perkins (*Cleveland Med. Journ.*, September, 1913) describe the results of their study of typhoid fever in Cleveland during the year 1912, during which year hypochlorite disinfection of the water supply was practically continuous. Typhoid fever in Cleveland showed a diminution of nearly one-half in the reported incidence, and one-half in the reported deaths, during the period considered. Comparison by months showed that this change was accounted for by the absence of a winter epidemic, and a marked diminution in the autumn epidemic, as well as a lowering of the totals all along the line. There was a marked increase of the population during the period, and the only sanitary change of extensive influence was the disinfection of the water supply, begun in September, 1911, though an active fly campaign in the early part of the summer must not be forgotten. The chlorine dosage of the water was diminished in February, and after this there was a steady rise in the typhoid incidence, though the small number of cases in the city made the total possible pollution of the water supply smaller than in previous years. A rise has continued ever since (chlorine dosage being always below the recommended figure), and at the time this article was submitted for publication conditions were not very dissimiliar to what they were before the beginning of the treatment of the water. It seemed, therefore, reasonable to conclude that the diminution noted immediately after the inauguration of the disinfectant treatment, and persistent to a degree roughly comparable to the adequacy of the chlorine dosage, was closely related to that treatment, and that the relation of the main periods of infection of the water, as noted in the City Laboratory, to the increases in the typhoid incidence are further evidence of a constant and variable water infection of a dangerous type. The original contention that unless an amount equivalent to 0.7 parts per million of actually available chlorine was used in the treatment of the water the results would be unsatisfactory, appears to be borne out by the investigation, and is further confirmed in a general manner by the findings in other cities where an amount equal to or greater than this has been found essential for successful disinfection. A weak dosage is of use only for those periods in which the water actually coming in contact with the disinfectant is weak in bacteria and organic matter, and the results of laboratory tests show that the variations in the quality of the water may be almost hourly in character. K.

Conduct of Pregnancy and Labour in Acute and Chronic Affections of the Heart.—Webster (*Surg., Gyn. and Obs.*, xvii., 3) says that the most serious cases are those in which the myocardium is degenerated, tending to cause cardiac dilatation, or in which, after former valvular disease, compensation has not been thoroughly established. If a patient with old cardiac disease becomes pregnant she should be put on strict *régime*, and should be protected from all physical and mental strain, special attention being given to the care of the skin, kidneys, and alimentary canal. If abortion or premature labour threatens, the uterus is better emptied. If signs of cardiac failure develop without signs of premature emptying of the uterus, it is best to keep the patient in bed and treat to improve the heart, waiting for a period of improvement to advise artificial termination of the pregnancy. When labour pains begin, the first stage should be conducted as in normal cases, but all straining should be avoided, and when the second stage is entered upon it is advisable to empty the uterus with forceps so as to avoid any strain from expulsive efforts, and at the same time to give vasodilator drugs. The contraction of the uterus puts further strain on the heart, and it is advisable that the placenta be gradually detached by the fingers introduced into the uterus, and if the right side of the heart is embarrassed some free bleeding should be allowed to occur, and this is easily obtained from the placental site in preference to bleeding from a vein. F.

The Conduct of Gynæcological and Obstetrical Operations with Endocarditis.—Polak (*Surg., Gyn. and Obs.*, xvii., 3) says that if compensation has ever been broken the tax of the last few weeks of pregnancy is usually so great that the margin of reserve is used up, and therefore no case should be allowed to go to full term. In the woman with chronic discompensation with myocardial change and renal insufficiency, the uterus should be emptied promptly, but this should be preceded by a pre-operative treatment to re-establish the cardiac balance. The earlier the uterus is emptied the less the cardiac strain. During labour the physical suffering should be partly relieved by morphia and the delivery left to nature as long as the heart is competent, but if signs of cardiac strain develop some form of artificial aid is indicated, and the operation may be done under ether-oxygen anæsthesia.

Immediately on the birth of the child there is a predisposition to congestion of the right heart, and this is increased by the closing of the placental sinuses. Bleeding from the placental site does not relieve this engorgement, but further weakens the patient, and so bleeding from the arm is recommended. When pregnancy has to be interrupted in multiparæ with a viable fœtus, induction should be done with the bag or bougies and the delivery left to nature, with forceps to hasten the second stage; while in primiparæ vaginal hysterotomy offers the greatest advantages.

F.

The Management of Puerperal Thrombophlebitis.—Findley (*Surg., Gyn. and Obs.*, xvii., 3), from his personal experience, concludes that Trendelenburg's operation is surgically correct, but as a practical proposition is a questionable procedure. The difficulties involved in making an accurate diagnosis are as yet insurmountable. It is not possible to judge the extent of the infection within the veins or elsewhere, even when the abdomen is opened; the sense of touch is unable to locate the limits of a thrombus, nor can the presence or absence of pus within the veins be judged with certainty. Failure to find bacteria in the blood gives no certainty of the localised character of the infection, nor can the condition of the lungs or other viscera be established. It is in direct violence to ordinary rules of practice to traumatise tissues in the immediate neighbourhood of a virulent infection. If the infected veins are not cut out the infection is only shut up by ligature above the zone of the infection, while the cutting out of the veins may disseminate the infection, and there is the risk of dislodging a thrombus in exploring the pelvic veins. It is a physical impossibility to ligate all the veins leading from the genital organs, and unless all channels are blocked there can be no assurance of stopping the infection. The physical resistance of all cases of puerperal infection is low, and the operation may only add to the burden. Little dependence can be placed on vaccines and serums. [The writer's views are in opposition to modern work in this country.]

F.

A New Method of Dealing with Scars.—Tubby (*Brit. Med. Journ.*, November 1st, 1913) advises the following original method. With a fine and strong-backed tenotomy knife a large number of multiple incisions are made transversely to the bands of keloid material. The incisions are made close together, not more than one-tenth of an inch apart; great care is taken that they should penetrate not only into the subcutaneous fat, but also extend one quarter of a half-inch into the neighbouring healthy skin. No attempt is made to arrest hæmorrhage except by pressure, and when bleeding has ceased a solution of thiosinamin is vigorously rubbed in, and if the scar tissue is very thick a few drops are injected into the most prominent bands. The writer does not hesitate to inject 15 min. at a time in a child and 20 min. in an adult. After the operation the part is put on a splint in as much extension as is possible without tearing the soft parts. This is accompanied by no excessive reaction and very little pain. After ten or fourteen days the wound will be healed and the mobility of the part increased by 50 per cent. The operation is then repeated and it rarely may be required three or four times. The results in over a dozen cases have been most satisfactory; scars which have been tough, resistant, and, in cases of the fingers, wire-like, have become soft and supple, the parts regaining their mobility, and their usefulness has been restored.

S.

A Method of Operation for Radical Cure of Inguinal Hernia.—Davies (*Brit. Med. Journ.*, September 20th, 1913) splits the external oblique as in Bassini's operation. The lower margin of the internal oblique is retracted upwards; the cord lying in its place is not disturbed. The peritoneum (not the sac) is opened from the internal ring upwards. When the abdominal cavity is opened the sac can be seen from the inside, and if omentum or other strictures are adherent they can be easily separated and drawn out of the sac. The lower end of the incision through the peritoneum is carried down to the neck of the sac and round it, so that the sac is separated like the finger of a glove cut off at the palm. The abdominal peritoneum is closed as in any other abdominal operation. By inserting a finger into the sac it can easily be dissected or swabbed out of its bed with little disturbance to the surrounding tissues. The operation is finished as in Bassini's method.

S.

MEDICAL NEWS & PASS LISTS.

Coroner and Medical Evidence—an Omagh Inquest.

There was an extraordinary development in the proceedings at a Coroner's inquest held on the 23rd inst. by Mr. Andrew C. Leitch, solicitor, in the Court House, Omagh, into the death by burning of a seven-year-old girl named Rose Hackett, of Omagh.

Evidence having been given by the mother and a neighbour, the Coroner expressed the opinion that, having regard to this evidence, the jury should have no difficulty in arriving at a verdict. Several jurors expressed disagreement with the Coroner, holding that medical evidence was essential, and one juror said the doctor who dressed the child's wounds should be heard.

The Coroner said this was a plain case, the facts were clear, and he was not going to run the risk of a surcharge of the doctor's fee when there was no necessity to call a doctor. It was not a matter for the jury what witnesses should be called.

A juror said that personally he was not satisfied that the evidence given was sufficient to enable the jury to arrive at a verdict. Another juror said, with all respect to the Coroner, medical evidence was produced in all such inquests..

Some heated remarks between the Coroner and the jury followed, and eventually the Coroner administered an oath to Sergeant Sadlier to take the jury in charge and keep them without food or light, and not allow them to speak or converse with any other person until they had arrived at a verdict. The jury were then locked up, the Coroner withdrawing to his office, while two constables kept guard at the door of the jury-room.

About an hour later the Coroner reappeared in response to a communication from the jury that they could not ascertain the cause of death in the absence of medical evidence.

The Coroner informed the jury that their verdict should be "Died as a result of burns." He recapitulated the evidence given by the witnesses, and again told the jury it was not their province to select witnesses, because if they were allowed to do so it would reduce Coroners' inquests to farces. If allowed to call witnesses the jury would be usurping his position. He then retired, subsequently reappearing with Dr. H. B. Fleming. Addressing the jury, the Coroner intimated that, although he did not consider it necessary, he had procured a medical witness.

Dr. Fleming then described the burns received by the child, and stated that burning was the cause of death. At the conclusion of his evidence, Dr. Todd, Medical Officer, walked into the room, and there ensued a sharp passage of words between him and the Coroner, the jury supporting Dr. Todd, and requesting the Coroner to apologise for remarks which they considered unjustifiable.

The Coroner said that it was his duty to tell them whether medical evidence was required or not, and in this case he was convinced there was no necessity for it. Some further angry remarks passed, and the jury, after long deliberation, returned a verdict that death was due to shock, caused by extensive burns, accidentally received.

The Lister Memorial at King's College.

It is announced that Lord Rayleigh will unveil a tablet to the memory of Lord Lister at King's College, London, on Wednesday, January 14th, at 4.30.

The Aberdeen Medico-Chirurgical Society.

The annual dinner of the Aberdeen Medico-Chirurgical Society was held on December 19th in the Society's Building, King Street. There was a large attendance. Dr. J. R. Levack, Chairman, presided. Professor Ashley W. Mackintosh, Vice-Chairman, was the croupier. After dinner a toast list and an enjoyable programme of music was submitted. The following was the toast list:—"The King and Queen"; "The Imperial Forces," by Dr. H. Edgar Smith, replied to by Captain Robertson, R.A.M.C. (T.F.); "The Founders of the Society," by Mr. J. Scott Riddell, M.V.O.; "The University and Medical School," by Mr. G. M. Cook, replied to by Emeritus Professor Stephenson and Dr. Thomas Fraser; "The Medico-Chirurgical Society," by Dr. Kenneth Gillies, replied to by Professor A. W. Mackintosh; "The Guests," by Dr. James Crombie, replied to by Dr. Robert Keith; and "The President," by Dr. David Lawson.

The Association of Registered Medical Women.

At a recent meeting of the Association of Registered Medical Women the following resolution was carried: "That the Association, while recognising that the proposed scheme for a women's medical service in India in many respects offers improved conditions for the work of women under the Dufferin Fund, desires strongly to protest against the scale of remuneration offered, which is entirely inadequate for the work which the medical women are asked to undertake, and also the subjection of medical women to a lay committee, for the constitution of which no guarantee is offered, yet which has the power of punishment for acts of which the committee may disapprove. The Association feels that these defects will be fatal to the success of the scheme, since no first-rate medical women will consent to work under such conditions."

The National Medical Union.

The Provisional Federating Council of the National Medical Union have formulated the following policy—viz.:—

(1) To maintain the freedom of the medical profession in its professional and personal relations with the public.

(2) To support the public in maintaining a corresponding freedom and to safeguard the national health.

(3) To oppose the present arrangements for medical benefits under the National Insurance Acts, and to decline professional service under such arrangements.

(4) To preserve an independent attitude with regard to party politics.

Since its inception at the Conference of the Non-Panel Associations held on November 29th, the National Medical Union has actively pushed forward the initial steps of organisation. New non-panel associations have been formed, and members in isolated positions in all parts of the country have been enrolled at headquarters.

In order that there shall be no misconception as to the objects of the National Medical Union, and in view of the crisis through which the medical profession is passing, it is necessary to make it clear that the Union is an organisation pledged solely to non-panel interests.

The Union is established in its offices in the "Morning Post" Buildings, 346 Strand, London, to which address all non-panel practitioners who are in sympathy with the above policy, and who have not already become members through their local non-panel association, should communicate.

Gift for Cancer Research.

Mr. Arnold Friedlander, merchant, of Messrs. J. and A. Friedlander, and of the Anglo-Transvaal Association, director of the United South Africa Association, Ltd., and other companies, a naturalised British subject, left estate in the United Kingdom of the gross value of £192,926, of which the net personalty has been sworn at £187,748.

The testator left £5,000 for a Cancer Research Fund, to be applied as his executors may direct towards increasing the knowledge of the cause, characteristics, and effects of cancer and allied diseases, and the best means of the prevention, alleviation and cure thereof.

Gift to a Hospital.

It is announced that the Brompton Hospital for Consumption and Diseases of the Chest has received from Mrs. C. Theodore Williams a cheque for £1,000 to name a ward in the Hospital in accordance with the wishes of the late Dr. C. Theodore Williams, who was attached to the Hospital as Physician and Consulting Physician for over 45 years.

University of Dublin.

A meeting of the Senate of Dublin University was held on Saturday, the 20th inst., for the purpose of conferring degrees. The following degrees in medicine were conferred:—

Baccalaurei in Medicina, in Chirurgia, et in Arte Obstetricia.—Ernestus Bantry-White, Fredricus G. Beatty, Guilelmus S. Boyd, Guilelmus St. L. Evans, Geoffrey M. M. Fleming, Guilelmus F. Gibson, Joseph Harvey, Reginald H. Jones, Jacobus C. Kelly, Percival G. Leeman, Johannes A. MacMahon, Stephanus J. Malherbe, Herbertus E. Murray, Guilelmus De Malet Peyton, Blacker C. Powell, Johannes G. C. Stubbs, Eleanor E. Taylor.

Baccalaureus in Medicina.—Jacobus C. M'Walter.

Doctores in Medicina.—Fredricus A. G. Davis, Jacobus H. Grove-White, Samuel G. S. Haughton, Jacobus C. Kelly, Dorothy K. Milne, Arturus F. B. Shaw.

In Absentia.—Doctor in Medicina.—Haroldus T. Marrable.

PASS LISTS.

The London School of Tropical Medicine.

The following candidates have passed the examinations during the October-December Session, 1913:—Passed with distinction: W. H. Kauntze (Colonial Service), M.B., B.S.Lond., M.R.C.S. A. R. Paterson, (Colonial Service), M.B., Ch.B.Glasg., M. F. Reaney (Capt. I.M.S.), M.B.Lond., D.P.H.Lond. Passed: D. T. Mitchell, M.R.C.V.S., R. F. Steel (Capt. I.M.S.), M.B.Dub., A. S. Burgess (Colonial Service), M.B., B.C., M.R.C.S., D. L. Graham (Capt. I.M.S.), M.B., Ch.B.Glasg., J. R. Ridlon (U.S. Public Health Service), M.D.Maine, R. Drummond (Colonial Service), M.R.C.S., L.R.C.P., T. P. Fraser (Colonial Service), M.B., B.Ch.Aber., D.P.H.Camb., E. H. Griffin, L.M.S.S.A., R. G. Perkins, M.D.Syracuse, C. R. Bakhle (Maj. I.M.S.), M.R.C.S., L.R.C.P., H. W. Furnival (Colonial Service), M.B., B.S.Durh., J. K. A. Hofmeyr, M.B., Ch.B.Edin., P. A. Clearkin (Colonial Service, M.B., B.Ch., B.A.OBelfast, E. J. H. Garstin (Colonial Service), M.D., L.M.L.S.Dub., A. I. Jackson, L.R.C.P. and S.Edin, K. Ghosh, L.M.S.Calcutta, L. R. Sharples (Colonial Service), M.B., B.Ch.Edin., Miss J. Crozier, M.D.Michigan, C. R. Avari (Assistant Surgeon, Indian Plague Commission), L. G. Fink, M.B., C.M.Edin., W. F. Masters, L.R.C.P.Lond., R. G. Ball (Colonial Service), M.B., B.Ch., B.A.O.Dub., Miss M. I. Balfour, M.B., C.M. Edin., M.D.Brux., J. R. Dodd (Colonel A.M.S.), M.D.Durh., F.R.C.S.Eng., D.P.H.Lond., G. V. Fiddian (Colonial Service), M.B., B.C.Camb., C. S. Harwood, M.B.Lond., D.P.H.Lond., S. Shepheard, M.R.C.S., L.R.C.P., B. Sefton, M.D.Brazil, D. S. Bryan-Brown, M.R.C.S., L.R.C.P., L. M. Bisvas, L.M.S.Calculla, C. B. Mack, M.D.Penn., J. Atkinson (Colonial Service), M.B., B.Ch.Glasg., E. B. Pearson, M.D.Illinois.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

BRITISH MEDICAL ASSOCIATION.

Just before going to press we are able to report that the Extraordinary General Meeting of the British Medical Association of the 30th December, has been held, and the new regulations carried by 12 to 1, some thirteen members being present. It is now, therefore, merely a matter of clerical procedure to raise the subscription to £2, and to extend the borrowing powers of the Association.

Mr. E. Fitch (London, E.).—We understand that the London Post-Graduate Association, 20 Hanover Square, London, W., is to be wound up to-day, December 31st.

WORKMEN'S COMPENSATION ACT, 1906.

The Secretary of State for the Home Department gives notice that he has decided to appoint a Specialist Medical Referee under the Workmen's Compensation Act, 1906, to act in all aural cases arising in the Sheriffdom of Lanarkshire in which the services of a Medical Referee are required. Applications for the post should be addressed to the Private Secretary, Scottish Office, and should reach him not later than 20th January, 1914.

M.B., B.S. (Brighton).—It is said that a solution of cellulose in acetone, known as "pelliculine," has been adopted by Dr. Guillaume-Louis, a surgeon of Tours, to prepare bandages in order to permit of their being used to hold injured limbs in position. It forms an incombustible and resistant film which is superior to celluloid, besides being much cheaper.

An Ipswich Reader.—The matter is dealt with editorially in our present issue. We agree that a more thorough inspection of imported food products should be carried out, though in the case of the metropolis the hands of the sanitary staff are already over full.

CHRISTMAS HOLIDAYS AND THE POST.

Several subscribers having notified us of the non-delivery of the weekly copy of this journal last week, it is probable that others have not received copies owing to the formidable difficulties of the postal service at Christmas. Should any of our readers who have not yet written us have failed to receive the number for December 24th, our publisher will be pleased to send a duplicate on receipt of post-card.

Dr. R. W. (Hants.).—The observations of Edmunds show that animals will survive total thyroparathyroidectomy if they are fed on large quantities of milk, but not if the milk be obtained from animals already thyroidectomised.

Mr. B. Wood (London, S.W.).—Our correspondent might apply to the Medical Superintendent, Northumberland House, Finsbury Park, N., where such cases are received.

Meetings of the Societies, Lectures, &c.

Monday, January 5th.

Rontgen Society.—The meeting will be held (by kind permission of the authorities), at the Middlesex Hospital, at 8.15 p.m. Paper (illustrated by lantern slides) by Dr. Jean Clunet, Paris, on "Histological Changes produced by X-rays on Animal Tissues; Destructive and Hyperplastic Action of X-rays; Practical consequences in regard to Radio-Therapy and protection of the Radiolgist."

Thursday, January 8th.

North-East London Clinical Society (Prince of Wales's Hospital, Tottenham).—4.15 p.m.: Address by Dr. Charles R. Box. Subject: "Pelagra" (with lantern demonstration). Election of members.

Appointments.

Burrow, J. le Fleming C., M.B., Ch.B.Edin., M.R.C.P.Lond., Honorary Physician to the Leeds Public Dispensary.

Deakin, H. V., M.R.C.S., L.R.C.P.Lond., House Surgeon at University College Hospital.

Gould, A. L. Pearce, M.B., B.Ch.Oxon., Obstetric Assistant to University College Hospital.

Lee, Harry, M.B., B.C.Cantab., F.R.C.S.Eng., Ophthalmic Surgeon to the Leeds Public Dispensary.

Marshall, Cole, M.D.Lond., F.R.C.S.Eng., Assistant Surgeon to the Western Ophthalmic Hospital

McLorinan, W., L.R.C.P. and S.Irel., Certifying Surgeon under the Factory and Workshop Acts for the Belfast, North, District of the County of Antrim.

Richards, Maude M., M.B., B.S.Lond., Clinical Assistant to the Throat Department at the Royal Free Hospital.

Salisbury, Walter, M.B., B.S.Lond., M.R.C.S., L.R.C.P.Lond., Resident Medical Officer at the Hospital for Women, Soho Square, W.

Trotter, Wilfred, M.S.Lond., F.R.C.S.Eng., Full Surgeon on the Staff of University College Hospital.

Walker, R. A., M.B., B.C.Cantab., F.R.C.S.Eng., Certifying Surgeon under the Factory and Workshop Acts for the Peterborough District of the County of Northampton.

Vacancies.

Warwick County Asylum, Hatton, near Warwick.—Second Assistant Medical Officer. Salary £200 per annum, with full board, lodging, and laundry. Applications to Dr. Miller, Medical Superintendent.

Nottingham General Dispensary.—Resident Surgeon. Salary £220 per annum, with apartments, attendance, light, and fuel. Applications to 12, Low Pavement, Nottingham.

County Asylum, Chester. Third Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Joint Counties Asylum, Carmarthen, South Wales.—Second Assistant Medical Officer. Salary £180 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Royal Mineral Water Hospital, Bath.—Resident Medical Officer. Salary £120, with lodging, board and washing. Applications to the Secretary.

Brentford Union.—First Assistant Medical Superintendent. Salary £185 per annum, with furnished apartments, rations, washing, etc. Applications to W. Stephens, Clerk to the Guardians, Union Offices, Isleworth, W.

London County Asylum, Claybury, Woodford Bridge, Essex.—Junior Assistant Medical Officer. Salary £200 a year, with board, furnished apartments, and washing. Applications to H. F. Keene, Clerk to the Asylums, Committee, Asylums Committee Office, 6, Waterloo Place, S.W.

Wilts County Asylum, Devizes.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, attendance and laundry. Applications to Guy W. Jackson, Clerk to the Committee.

Births.

Deane-Butcher.—On December 24th, at Pittsworth, Queensland, to Dr. C. B. and Mrs. Deane-Butcher, a son.

Dunkerton.—On December 27th, at 29 Kenilworth Court, Putney, S.W., the wife of Captain N. E. Dunkerton, R.A.M.C., of a son.

Marriages.

Lobb—Greenall.—On December 23rd, at Christ Church, Woburn Square, London, W.C., E. Leslie Martyn Lobb, M.S.Lond., F.R.C.S.Eng., of Hong Kong, China, only son of the Rev. J. and Mrs. Martyn Lobb, of Cheshunt, Herts., to Louise Josephine, eldest daughter of J. N. and Mrs. Greenall, of Nottingham.

Mutch—Lane.—On December 23rd, at St. George's Church, Hanover Square, W., Nathan Mutch, M.A., M.B., B.C. Cantab., M.R.C.P.Lond., eldest son of Mr. and Mrs. Nathan Mutch, of Rochdale, to Eileen, youngest daughter of Sir Arbuthnot and Lady Lane, of 21, Cavendish Square, W.

Powell—Griffiths.—On December 23rd, at Libanus Chapel, Blaenclydach, James Powell, M.R.C.S., L.R.C.P., second son of Mr. J. H. Powell, of Aberdare, to Bessie, daughter of Mr. R. S. Griffiths, J.P.

Robinson—Aldersmith.—On November 21st, at St. Paul's Cathedral, Calcutta, Chas. E. Robinson, of Assam, son of George Robinson, of Gainsborough, England, to Dorothy Constance, daughter of H. Aldersmith, F.R.C.S., M.B., Horsham, Sussex.

Deaths.

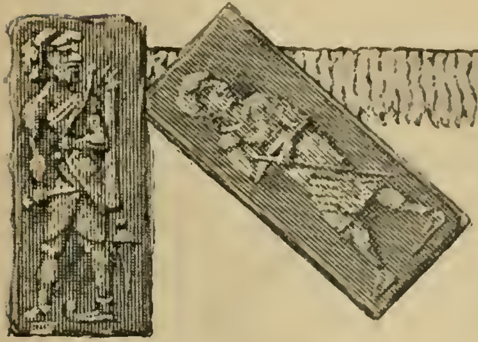
Brown.—On December 12th, at 2 Edgehill Road, Sheffield, John Henry Brown, M.D.Edin., M.R.C.S., aged 54.

Fleming.—On December 22nd, suddenly, Alexander John Fleming, M.D., of 3 Arkwright Road, N.W., son of the late Rev. Robert Winning Fleming, of Coleraine, Ireland.

Lipscombe.—On December 22nd, at 52 Cambridge Road, Hove, as the result of an accident, Richard Nicholson Lipscombe, M.R.C.S.Eng., L.S.A., aged 84.

Thornton.—On December 28th, at Berkeley Lodge, Trinity Square, Margate, Bertram Thornton, M.R.C.S., L.R.C.P., in his 57th year.

TEXTURÆ ANTIQUÆ, 2—AKKADIAN



How the Prescriber can Standardise the Dispensing of his Prescriptions—

By prescribing the fine products of Burroughs Wellcome & Co. whenever possible.

For example—'TABLOID' Brand products.

In number they are B.P. and more.

In reliability they are B.P. or BETTER.

They fulfil the spirit of the prescription.

They make for great certainty of obtaining satisfactory results.

They standardise dispensing all over the world.

℞ 'Tabloid' —

BURROUGHS WELLCOME & CO., LONDON
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN
SHANGHAI BUENOS AIRES BOMBAY

London Exhibition Room: 54, WIGMORE STREET, W.
All communications intended for the Head Office should be addressed to Snow Hill Buildings, London, E.C.

A cylinder seal belonging to the scribe of an early Akkadian prince.

The decorations show the cylindrical character of the seal and a conventional representation of the semitic plaid as engraved upon the seal. Circa B.C. 2700.

COPYRIGHT

Fellows Syrupus Hypophosphitum

Quadraginta per annos et a medicis et ab aegris orbis terrarum totius probatus

Compositio sui generis neque imitabilis

Reject < Cheap and Inefficient Substitutes
Preparations "Just as Good"

THE NATURAL MINERAL WATER
OF
VICHY-CÉLESTINS
(STATE SPRING)

For DISEASES of the KIDNEYS, GRAVEL, GOUT, RHEUMATISM, DIABETES, &c.

VICHY-ÉTAT PASTILLES

Two or Three Pastilles after each meal facilitate digestion.

CAUTION.—Each bottle from the STATE SPRINGS bears a neck label with the word "VICHY-ÉTAT" and the name of the SOLE AGENTS:—

INGRAM & ROYLE, LTD.,
Bangor Wharf, 45 Belvedere Road, LONDON, S.E.
And at LIVERPOOL and BRISTOL.

Printed on Thin Paper for Foreign Postage.

Medical Press and Circular. Estab. 1838.

Old Series, Vol. CXLVII. New Series, Vol. XCVI. No. 3,869. WEDNESDAY, JULY 2, 1913. Price 5d. Post free 5½d.

SUMMARY OF CONTENTS.

PAGE

Notes and Comments 1

Leading Articles 2

Current Topics 3

Personal 5

Clinical Lecture on Absence of Abdominal Respiratory Movement as an Indication of Pericarditis. By W. Essex Wynter, M.D., F.R.C.P.Lond. 6

Original Papers:—

Intestinal Angulations and Kinks Associated with Stasis. By W. I. de C. Wheeler, F.R.C.S.I. 8

A Guiding Principle in Therapeutics. By J. Snowman, M.D., M.R.C.P.Lond. 12

Breast Feeding of Infants. By Ella G. Webb, M.D. 13

Operating Theatres—

London Hospital 17

Transactions of Societies:—

Royal Academy of Medicine in Ireland 17

The New London Dermatological Society 18

Correspondence—Foreign and Home .. 19

Letters to the Editor 21

Obituary 22

Medical News in Brief 23

Notices to Correspondents, &c. 24

FOR FULL TABLE OF CONTENTS SEE NEXT PAGE.

THE SURGERY OF CHILDHOOD:
WORKS BY
EDMUND OWEN, M.B., F.R.C.S.,
Consulting Surgeon, St. Mary's Hospital, and to the Hospital for Sick Children, Great Ormond Street, London.

CLEFT PALATE AND HARE-LIP:
The Earlier Operations on the Palate.
Pp. 111, with 32 Illustrations. Price 2s. 6d. net.
"*The most favourable time in life for operating on a cleft palate is between the age of two weeks and three months.*" (Page 41.)
London: Bailliere, Tindall & Cox.

BY THE SAME AUTHOR.
SURGICAL DISEASES OF CHILDREN.
Third Edition, Revised and Enlarged.
Pp. 504, with 5 Chromo-lithographs and 120 Engravings.
London: Cassell & Co. Ltd.

Price 14s. net, post free 14s. 6d.
SQUIRE'S COMPANION
18th Edition.

The new THIRD APPENDIX to SQUIRE'S POCKET COMPANION indicates the nature of the information contained in SQUIRE'S COMPANION, and affords reasons why, if you have not already procured the volume, you should allow us to place literature and facts regarding it before you.

The THIRD APPENDIX will be sent you gratis on application.
Squire & Sons, 413 Oxford Street, London, W.

NEW EDITION in Two Vols. 45s. net.
DEFORMITIES,
INCLUDING
DISEASES of the BONES and JOINTS.
A Text Book of Orthopaedic Surgery.
Illustrated by 70 Plates and over 1,000 Figures and by notes of cases.
By A. H. TUBBY, M.S.Lond., F.R.C.S.Eng.
"The standard text-book in English on the subject."—Lancet.
1st Edition. "Standard work on the subject in the English language."—British Medical Journal.
Macmillan & Co., Ltd., St. Martin Street, London, W.C.

In Two Parts.
DISEASES of the ANUS and RECTUM
By D. H. GOODSALL, F.R.C.S.,
Late Senior Surgeon, Metropolitan Hospital, and St. Mark's Hospital,
AND
W. ERNEST MILES, F.R.C.S.,
Surgeon, Cancer Hospital; Surgeon, Gordon Hospital.
Part I., 8vo, 7s. 6d. net. Part II., 8vo, 6s. net.
Longmans, Green & Co., London, New York, Bombay.

NOW IN PREPARATION
NON-OPERATIVE TREATMENT OF
ENLARGED PROSTATE WITH THE WAVE CURRENT.
By L. ELIOT CREASY, M.R.C.S., L.R.C.P.

Dr. T. Luson (Norbiton) writes that the results of the method by the author are the prompt disappearance of discomfort and distress, the speedy removal of symptoms and diminution in the size of the gland.

London; James Nisbet & Co., Berners Street.

By E. HURRY FENWICK, F.R.C.S.,
Professor of Urology at the London Hospital:
President, Congress of International Association of Urology.
With 80 Plates and 15 Text Figures. Price 10s. 6d. net.
The Value of Radiography in the Diagnosis and Treatment of Urinary Stone.
A Study in Clinical and Operative Surgery.
London: J. & A. Churchill, 7 Great Marlborough Street.

By FREDERICK J. McCANN, M.D.Edin., F.R.C.S.Eng.
Samaritan Free Hospital for Women, London, N.W.
CANCER OF THE WOMB:
ITS SYMPTOMS, DIAGNOSIS, PROGNOSIS AND TREATMENT.
Fully Illustrated. 20s. net.

Liverpool Medico-Chirurgical Journal.—"Cancer of the Womb, by F. J. McCann, is a book that can be recommended alike to the general practitioner and the specialist. Written in a fluent manner, it embodies the ripe experience of a renowned operator, trained observer, and patient investigator."

Edinburgh Medical Journal.—"This book is one of very great merit; it will be read with interest both by the specialist and general practitioner as an authoritative exposition of the important subject with which it deals."

Practitioner.—"Dr. McCann has produced a valuable work which deserves to be widely known."

St. Bartholomew's Hospital Journal.—"The plates are excellent. This is a book we can thoroughly recommend."

London: Henry Frowde and Hodder and Stoughton.

Second Edition. With 6 Illustrations. Price 2s. 6d. net.
THE HAIR AND ITS DISEASES, including
Ringworm, Greyness, and Baldness.
By DAVID WALSH, M.D., C.M.Edin., Senior Physician to the Western Skin Hospital.
London: Bailliere, Tindall & Cox, 8 Henrietta St., Covent Garden.

Registered for Home and Foreign Transmission.

Table of Contents.

NOTES AND COMMENTS—

PAGE.
Sir Ronald Ross and the Medical Research Committee 1
Sir Victor Horsley and the R.C.S... 1
Malingering under the State Insurance 1
Should Medical Referees be Appointed? 2
The Extermination of Sleeping Sickness 2
A Scientific Experiment Wanted .. 2

LEADING ARTICLES—

Marriage, Birth and Death Rate in 1912 2

CURRENT TOPICS—

Ghosts 3
The Rob 3
X-Rays in the Diagnosis of Gastric Ulcer 3
Medical Men's Hobbies 4
Medical Certification in Ireland .. 4
The Systematic Study of Chronic Disease 4
Human Asymmetry.. 4
The Problem of the Consumptive Lodger 5
PERSONAL 5

CLINICAL LECTURE—

PAGE.
Absence of Abdominal Respiratory Movement as an Indication of Pericarditis. By W. Essex Winter, M.D., F.R.C.P.Lond. 6

ORIGINAL PAPERS—

Intestinal Angulations and Kinks Associated with Stasis. By W. I. de C. Wheeler, F.R.C.S.I. .. 8
A Guiding Principle in Therapeutics. By. J. Snowman, M.D., M.R.C.P. Lond. 12
Breast-Feeding of Infants. By Ella G. Webb, M.D. 13

OPERATING THEATRES—

London Hospital 17

TRANSACTIONS OF SOCIETIES—

Royal Academy of Medicine in Ireland 1
The New London Dermatological Society 18

CORRESPONDENCE—FOREIGN—

Germany—

Relation between Diseases of the Heart and Kidneys and Pregnancy, Labour and Childbed 19

Austria—

PAGE.
Splenectomy for Pernicious Anæmia 20
Splenomegaly and Icterus .. 20

CORRESPONDENCE—HOME—

Scotland—

Edinburgh Corporation Tuberculosis Scheme 20
Complimentary Dinner to Dr. Alice Hutchison 21
Suffragist Outrage at St. Andrew's University 21

LETTERS TO THE EDITOR—

Mr. McKenna, Sir Victor Horsley and the R.C.S.Eng. 21
The Abnse of Mercury 21
Infantile Mortality 22
A Good Holiday Field 22

OBITUARY—

Sir Jonathan Hutchinson 22
MEDICAL NEWS IN BRIEF 23
NOTICES TO CORRESPONDENTS, WEEKLY DIARY, LECTURES, MEETINGS, VACANCIES, APPOINTMENTS, BIRTHS, MARRIAGES, DEATHS, ETC., ETC. .. 24

THE NEW PATENT "PHONOPHORE" STETHOSCOPES

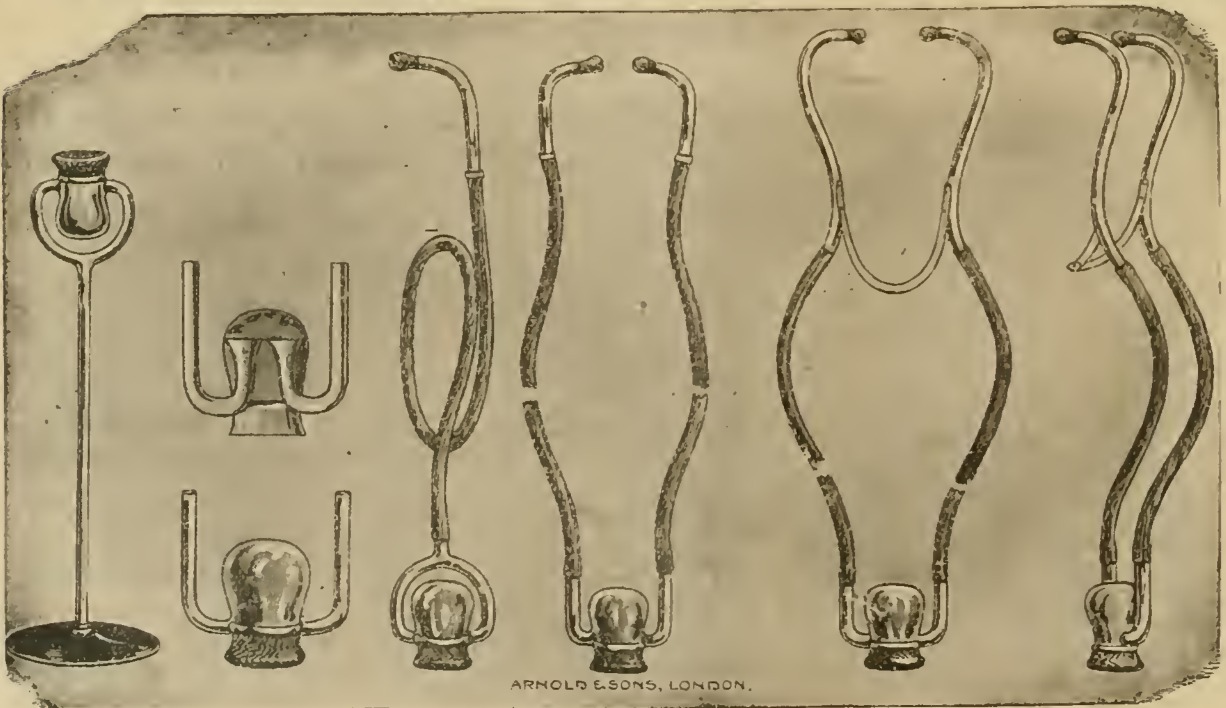


Fig. A. Fig. B. Fig. C. Fig. D. Fig. E. Fig. F.

The New Patent "Phonophore" Stethoscope (Fig. A.) 6/6
Ditto Chest piece (Fig. B.) 5/6
Ditto Single flexible (Fig. C.) 7/6
Ditto Double flexible (Fig. D.) 10/6
Ditto Binaural (Fig. E.) 12/6
Ditto Binaural folding (Fig. F.) 13/6

COPIES OF UNSOLICITED TESTIMONIALS.

Dear Sirs,—"I find that most certainly the chest sounds are rendered clearer and more distinct by your 'Phonophore' than by any stethoscope I have used during over 30 years' work."—Yours, F.R.C.S.

Dear Sirs,—"I have found your 'Phonophore' by far the best stethoscope I have ever used."—Faithfully Yours.

Extract from the "British Medical Journal," Oct. 28th, 1911,—"Some years ago Messrs. Arnold & Sons, of Giltspur-street, E.C., brought out a stethoscope which they named the 'Phonophore.' Its construction secured a considerably increased volume of sound, and the appliance gained favour among those dissatisfied on general grounds with ordinary stethoscopes, or whose needs, owing to some lack of aural acuity, were not adequately met thereby. Of this appliance the same firm has recently brought out a modification in which the bell-like attachment constituting the chest-piece is provided with two sound tubes instead of one. These tubes are continued upwards, the sound thus being conveyed to each ear direct from the collecting chamber. Each ear, therefore, receives the same amount of sound, although the same amount of sound may not be perceived if there is any difference in the hearing power of the two ears. The gross volume of sound is also greater than supplied even by the original 'Phonophore.' This modification of the 'Phonophore' is worth examination by anyone interested in stethoscopy."

ARNOLD & SONS, SURGICAL INSTRUMENT MANUFACTURERS, **Giltspur Street, London, E.C.**

SERIAL

P
Med
M
v.147

Medical press and circular

GERSTS